2024 HASTI & ICTM Conference

Event Schedule

Sun, Feb 18, 2024

12:00 PM

Registration

② 12:00 PM - 4:00 PM, Feb 18

♀ Atrium

1:00 PM

World Food Prize Purdue Youth Institute

② 1:00 PM - 1:45 PM, Feb 18

♥ Kennedy/Reagan

♥ Speaker



Anna Egan

Purdue University College of Agriculture

NGSS Bootcamp

② 1:00 PM - 2:45 PM, Feb 18

Science Education

Elementary K-5 Middle Level 6-8 High School 9-12

The Indiana Science Standards changed, so now what? Come learn all the new acronyms and just how easy it is to incorporate them into existing lessons.

▼ Speaker



Shannon Hudson

Teacher

Crawfordsville Middle School

Xplorlabs: Extraction to E-Waste

② 1:00 PM - 2:45 PM, Feb 18

Ecology/Environmental Science Middle Level 6-8 EXTENDED WORKSHOP

Xplorlabs: Extraction to E-Waste online pathway supports students in deep reflection of their relationships with energy consumption.

▼ Speaker



Amy Gilbert

Consultant

Underwriters Laboratories Research Institutes, Office of Research Experiences and Education

Water Moves Our Earth; Plants Stabilize Our Earth

② 1:00 PM - 1:45 PM, Feb 18

♀ Indianapolis C

Earth/Space Science | Middle Level 6-8

Water is the major force in shaping our planet. Simple models show students how plant residue prevents water runoff and soil erosion.

♥ Speaker



Suzanne Cunningham

Purdue University

Advancing Research on a Questioning Strategy in STEM Education: A Collaborative Initiative Between Teacher Educators and Elementary Teachers

② 1:00 PM - 1:45 PM, Feb 18

Interdisciplinary (i.e. S...

This research utilized a questioning strategy in elementary STEM lessons, to increase student-led questioning, critical thinking, and engagement. Results of the study will be shared.

Speaker



John Somers

Professor University of Indianapolis

Fractions are Fascinating: Utilizing Concrete Materials Before Jumping to **Traditional Algorithms**

② 1:00 PM - 1:45 PM, Feb 18

Mathematics Elementary K-5 Middle Level 6-8

Educators are currently asked to teach mathematics with methods very different from those they, themselves, were taught when they were young. In this session, participants will utilize concrete materials (pattern blocks) to explore addition, subtraction, multiplication, and division of fractions.

▼ Speaker



Ryan Flessner

Professor of Teacher Education Butler University

Using Desmos Art Projects as Math Assessments

② 1:00 PM - 1:45 PM, Feb 18

♀ Grand 6

Elementary K-5 Middle Level 6-8 Mathematics

Desmos Art Projects are such a fun and assess student knowledge of various functions. My 8th graders love using lines to create "pet houses" on the graphing calculator. My geometry students enjoyed graphing circles to create bubble wands--and printing them on the 3D printer. And my Algebra II students love designing roller coasters with polynomial graphs. Desmos Art can be applied to many secondary math classes. And there is really no ceiling. Check out the amazing work in the Desmos Art Show. This workshop will be interactive and participants will have the opportunity to start working on their own graphs and maybe even explore some of the newer graphing features of Desmos.

▼ Speaker



SEL: What's Math Got to Do with It?

② 1:00 PM - 1:45 PM, Feb 18

♀ Grand 7

Middle Level 6-8 High School 9-12 Mathematics

Strengthen SEL in your classroom by prioritizing the Social Emotional and Academic Development (SEAD) themes- Agency, Belonging, Discourse, and Identity. Engage in a math task, and connect the themes with the Standards for Mathematical Practice and content to promote a safe, equitable, and empowered class culture.

▼ Speaker



Rhonda Pierre

Professional Learning Specialist CPM Educational Program

Mathematizing Light to Make Art: An Integrated STEM Activity

② 1:00 PM - 2:45 PM, Feb 18

♀ Grand 8

College

High School 9-12 Mathematics Workshop (1 hour 45 minute session)

An activity where learners use mathematical terminology, concepts, and processes to build an art display using laser pointers and mirrors would provide an opportunity to apply the mathematics of angle measure and the science of light reflection in their designs.

▼ Speaker



Hanan Alyami Assistant Professor Purdue Fort Wayne

Teaching Critical Thinking in Science in the Age of Climate Denial and Misinformation

② 1:00 PM - 1:45 PM, Feb 18

♀ Veterans 1

Middle Level 6-8 High School 9-12 General

This session will help teachers address controversial topics in science education, providing methods and resources for integrating student-centered, inquiry-based, media analysis into instruction about climate and other potentially polarizing topics.

Student learning in science classes is increasingly challenged by student misconceptions and biases developed through uncritical reading of media sources—particularly the unrestrained resources on the internet. How do we give our students habits of questioning the source, purpose, credibility, and bias of all mediated messages - while deepening student engagement in our core curriculum? This interactive workshop will give participants the theory, methodology, and free resources for integrating critical analysis of media sources into the core science curriculum, with a focus on climate and other potentially challenging topics.

Educator and media literacy expert, Chris Sperry (Ithaca College's media literacy initiative, Project Look Sharp), will introduce the approach and resources. Teachers from the IU Educating for Environmental Change project, who have been integrating this approach into their science programs, will lead participants trough decoding activities they have developed and implemented in their classrooms.

Participants will be introduced to the theory and practice of Constructivist Media Decoding through role playing students and debriefing the process. The session will enable Hoosier science teachers to integrate critical thinking about challenging topics, build student-self-reflection, and deepen student engagement - while teaching to core standards and content. And they will gain access to hundreds of free media decoding lessons for science instruction and professional development resources that can be shared with colleagues.

▼ Speakers



Adam Scribner Other Indiana University



Chris Sperry



Michael Hamburger

Education's Role in Generative AI: Nuts, Bolts, and Prompt Engineering

② 1:00 PM - 1:45 PM, Feb 18

♀ Veterans 2

Science Education High School 9-12

Generative AI is the scientific calculator of this decade. Learn how to use it and where it fits. Equity, ethics, and new science career paths.

Hall Davidson, Senior Director of Global Learning Initiatives, Discovery Education

📢 Speaker



Hall Davidson

Hall Davidson, Senior Director of Global Learning Initiatives, Discovery Education Harrison High School, Evansville-Vanderburgh County School Corporation (Student)

30 Demos in 60 Minutes

② 1:00 PM - 1:45 PM, Feb 18

Veterans 3

Physical Science/Physics Middle Level 6-8

A demo show presented by members of the Indiana chapter of the American Association of Physics Teachers.

▼ Speakers



Spencer Perry PHD Student Indiana University Bloomington



Ben Grimes Physics Teacher Roncalli High School

What are phenomena and how do they work with the new Indiana Science **Standards?**

① 1:00 PM - 2:45 PM, Feb 18

♀ Veterans 4

Elementary K-5 High School 9-12 Middle Level 6-8 Science Education EXTENDED WORKSHOP

Phenomena are the basis for scientific discovery. At the end of the session, participants will better understand what phenomena are and why they are a key to science education using the new standards.

♥ Speaker



Sharon Cates Senior Instructor Phenomenon Science Education

2:00 PM

Bite-Size Inquiry in the STEAM Classroom

2:00 PM - 2:45 PM, Feb 18

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8 High School 9-12

Participants will walk away with "bite-sized" or small scale inquiry-based strategies and activities that can be incorporated within the content areas in the STEAM classroom.

▼ Speaker



Annamarie Vandrevala

Teacher

Franklin Park District 84 & DePaul University

Building a Hopeful Climate Future Together: An Authentic Group-Worthy Task **Using Climate Simulations**

② 2:00 PM - 2:45 PM, Feb 18

♥ Indianapolis D

Ecology/Environmental Science High School 9-12

Bring your laptop to explore a ready-to-go, NGSS-aligned climate lesson perfect for middle/high school groupwork!

▼ Speaker



Catherine Peterson

Teacher

Bloomington High School South

Increasing Teacher Awareness Student Performance on the New Digital PSAT and **SAT Assessments**

② 2:00 PM - 2:45 PM, Feb 18

♀ Indianapolis E

Middle Level 6-8 | High School 9-12 | Mathematics

Specific materials and resources for students, parents, and educators to understand, and for students score their best, on the new Digital PSAT and SAT Assessments will be discussed and provided.

♥ Speaker



Bill Reed Consultant **INcompassing Education**

Building Thinking Classrooms Across Curriculum

② 2:00 PM - 2:45 PM, Feb 18

♀ Grand 6

Elementary K-5 Middle Level 6-8 High School 9-12 Mathematics

Have you ever wondered how to implement BTC practices outside of the math classroom? Let us show you through a hands-on presentation where we will model how to utilize BTC practices in various content areas.

Speaker



Katie Sinzinger

Instructional Coach Franklin Community Schools

Cultivating Teachers who Flourish!

2:00 PM - 2:45 PM, Feb 18

♀ Grand 7

Drawing on the principles outlined in "The Imperfect and Unfinished Math Teacher" (Orton, 2022) and particular case studies, we will share strategies and systems that have worked to create a healthy environment for the coaching and development of teachers and leaders - leading to true professionalism and "flourishment"! Walk away with specific action steps that you can implement in your own building!

▼ Speaker



Jennifer Jensen Academics Director

Developing STEM literate students in Kindergarten

② 2:00 PM - 2:45 PM, Feb 18

♀ Veterans 1

Interdisciplinary (i.e. STEM) Elementary K-5 Pre-Elementary Pre-K-2nd

Learn how to develop STEM literate students by engaging them in a literacy based unit about Monarch Butterflies.

♥ Speaker



Kristen Poindexter

Allisonville Elementary School

Who's Asking the Questions in Math Class? Using Curiosity as a Catalyst for **Changing Curricula and Classrooms**

② 2:00 PM - 2:45 PM, Feb 18

♀ Veterans 2

Even though we want students to be curious in math, see its beauty, and wonder how it applies to their world, most students believe math class is a place where they're just given answers to questions they've never asked. Math leaders and teachers can change this belief by cultivating curiosity in math courses and classrooms. Learn strategies for inspiring students to ask their own questions, self-assess their curiosity, and value questions as much as answers.

Dr. Tim Hudson, Chief Learning Officer, Discovery Education

Hall Davidson, Senior Director of Global Learning Initiatives, Discovery Education

♥ Speakers



Hall Davidson

Hall Davidson, Senior Director of Global Learning Initiatives, Discovery Education Harrison High School, Evansville-Vanderburgh County School Corporation (Student)



Tim Hudson

Genetics and Natural Selection Through Integrated STEM

2:00 PM - 2:45 PM, Feb 18

♀ Veterans 3

Biology Life Science Middle Level 6-8 High School 9-12 College

Presentation of curriculum materials for engaging students with genetics and natural selection through mini robots that students design, 3D print, and compete against classmates.

▼ Speaker



Stuart White

Other

Purdue University

3:00 PM

Star Light, Star Bright! Learning to Read the Sky!

② 3:00 PM - 3:45 PM, Feb 18

∇ Kennedy/Reagan

Become a part of an exciting community of international star-spotters that report on the mysterious and everchanging patterns they see in the night

▼ Speakers



Allyson Mayer



Tess Burns Professional Development Specialist Imagine Learning

It's Elementary (Forensics)

② 3:00 PM - 4:45 PM, Feb 18

College Elementary K-5 General High School 9-12 Interdisciplinary (i.e. STEM) Middle Level 6-8

Pre-Elementary Pre-K-2nd EXTENDED WORKSHOP

Analyze fingerprints, footprints, handwriting, ink (chromatography), and fibers that can be done by elementary students. Then, create your own forensic science "whodunit"

♥ Speaker



Tyler Hudson Other AWS/Purdue

Xplorlabs: Science of Thermal Runaway

② 3:00 PM - 4:45 PM, Feb 18

General Physical Science/Physics EXTENDED WORKSHOP

Through the currently relevant problem of thermal runaway, participants are inspired to integrate the no-cost Xplorlabs: Science of Thermal Runaway as part of their classroom curriculum.

▼ Speaker



Amy Gilbert

Consultant

Underwriters Laboratories Research Institutes, Office of Research Experiences and Education

Formative Assessments Unleashed: Fueling Growth and Engagement

② 3:00 PM - 3:45 PM, Feb 18

♥ Indianapolis C

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

High School 9-12

I will present 15 engaging formative assessment strategies that I use in my classroom.

♥ Speaker



Brooke Stewart

High School Science Teacher South Central Jr Sr High School

Centering on Students' Communities and Lived Experiences in Integrated STEM **Education**

② 3:00 PM - 4:45 PM, Feb 18

♥ Indianapolis D

High School 9-12 Interdisciplinary (i.e. STEM) Middle Level 6-8

EXTENDED WORKSHOP

This session focuses on integrating students' communities and local knowledge in learning science and engineering in secondary science classrooms.

Co-presenters for this session: Elizabeth Thiel, D'Angelo Peters, Lynn Bryan

📢 Speaker



Khanh Tran

Postdoctoral Scholar in STEM Education Purdue University, West Lafayette

Integrating Diversity, Equity, and Inclusion into Our Elementary Mathematics Classrooms

② 3:00 PM - 3:45 PM, Feb 18

♥ Indianapolis E

Elementary K-5 Middle Level 6-8 Mathematics

In the summer of 2020, protests took place across the country. Citizens demanded attention be paid to diversity, equity, and inclusion. These initiatives must remain top-of-mind as we work with students. This session will tie mathematics to these important issues.

♥ Speaker



Ryan Flessner

Professor of Teacher Education Butler University

Intervention Equity in the Secondary Math Classroom

② 3:00 PM - 3:45 PM, Feb 18

♀ Grand 7

High School 9-12 Mathematics

We will explore various different ways to facilitate and integrate intervention strategies in the secondary math classroom to promote intervention equity for all students.

📢 Speaker



Michael Wagner

National STEM Content Specialist Houghton Mifflin Harcourt

Cultivating Math Confidence: Leveraging the Affective Domain to Ease Math **Anxiety and Empower Learning**

② 3:00 PM - 3:45 PM, Feb 18

♀ Grand 8

Interdisciplinary (i.e. STEM) Middle Level 6-8 High School 9-12 Teacher Educators

Unlocking Confidence: Exploring the Affective Domain's Role in Alleviating Math Anxiety. Discover how nurturing the affective domain of learning cultivates a positive mindset, reducing math anxiety's grip. Practical strategies for educators to empower students and foster a harmonious relationship with mathematics.

New Free HHMI BioInteractive Resource: Using Model Builder to Explore the Central Dogma, Biology of Skin Color, and More!

② 3:00 PM - 4:45 PM, Feb 18

♀ Veterans 1

Biology College

General High School 9-12 Life Science Middle Level 6-8

Explore a powerful interactive model-building tool, which allows students to check their own work while building their models. Participants are encouraged to bring a laptop.

📢 Speaker



Sherry Annee Biotechnology Teacher Brebeuf Jesuit Preparatory School

Connecting to the Sun Beyond the Eclipse

② 3:00 PM - 3:45 PM, Feb 18

♥ Veterans 2

Interdisciplinary (i.e. STEM)

Elementary K-5 Middle Level 6-8

High School 9-12

Examples of hands-on lessons that demonstrate the Sun's broad connections to multiple science standards.

♥ Speaker



Sarah Reynolds

Assistant Professor, Dept. of Physics & Earth-Space Science University of Indianapolis

Birdwatching: A field-based unit or short course

② 3:00 PM - 3:45 PM, Feb 18

♀ Veterans 3

Ecology/Environmental Science High School 9-12

I taught Birdwatching for the Indiana Academy's 2023 May Term, focusing on recreational observation of birds with a modest introduction to the science of ornithology.

♥ Speaker



Donald Winslow

Assistant Teaching Professor of Life Science Indiana Academy for Science, Mathematics, and Humanities

Activities and Opportunities for Learning on the Energy Frontier

② 3:00 PM - 3:45 PM, Feb 18

Veterans 4

Physical Science/Physics | Middle Level 6-8 | High School 9-12 | College | General

This session presents professional learning opportunities for teachers and activities to bring High Energy Physics Research into the Classroom for students.

📢 Speaker



Marla Glover

PhD student in Physics Education Purdue University

Mastering the Teaching of Basic Fact Fluency - We Can Do It!

② 3:00 PM - 4:45 PM, Feb 18

♀ Veterans 5

Elementary K-5 Mathematics EXTENDED WORKSHOP

In this session, participants will deepen their understanding of basic fact fluency progressions and engage in fluency activities for assessment and practice in the elementary classroom. Participants will be armed with tools they can immediately use in their classrooms.

▼ Speaker



Courtney Flessner Consultant Keep Indiana Learning

BTC Across Curriculum

② 3:00 PM - 3:45 PM, Feb 18

♀ Veterans 5

Elementary K-5 High School 9-12 Middle Level 6-8

Have you ever wondered how to implement BTC practices outside of the math classroom? Let us show you through a hands-on presentation where we will model how to utilize BTC practices in various content areas. We will be modeling how to implement the Building Thinking Classroom practices in other content areas outside of math. We will work through the 4 toolkits focusing on different ones with the different contents. We will be modeling these through sample lessons where teachers will be acting as the students in the lesson. They will be up and working at vertical non-permanent surfaces.

♥ Speakers



Mandy Ramey

Instructional Coach Franklin Community Schools



Katie Sinzinger

Instructional Coach Franklin Community Schools

4:00 PM

Rocketry + Avionics: Taking Data to New Heights

4:00 PM - 4:45 PM, Feb 18

♥ Indianapolis C

Physical Science/Ph...

Presentation on free online courses that teach rocketry. Two strands of scaffolded rocketry courses, one for 8th Science - Physical Science and one for Physics classrooms.

♥ Speaker



Heather Arnett

University of Illinois

Beyond Key Words in Story Problems

② 4:00 PM - 4:45 PM, Feb 18

♀ Indianapolis E

Elementary K-5 Middle Level 6-8 Mathematics Teacher Educators

How can we teach through the lens of reading comprehension to support understanding and meaning of math in context? Approaching problem solving with reasoning and comprehension in mind.

♥ Speaker



Leah Stayer

Indiana University

We Fit Together Like a Stack of Swiss Cheese: Teaching using Reveal Math in a **Thinking Classrooms**

② 4:00 PM - 4:45 PM, Feb 18

♀ Grand 6

Elementary K-5 Mathematics

Immerse yourself in a lesson from beginning to end using Reveal Math and Building Thinking Classrooms Practices. Learn how the essential component of Reveal Math provides the perfect resources to structure conceptual learning and critical thinking for all students when partnered with Peter Liljedahl's 14 practices for Building Thinking Classrooms.

▼ Speaker



Melisa McCain

Instructional Coach Franklin Community Schools

Adapting Math Activities for Learners with Intellectual Disabilities

2 4:00 PM - 4:45 PM, Feb 18

♀ Grand 7

In this session the presenters will share classroom mathematics activities for students in grades 2-8 with the audience and demonstrate how they have been adapted or modified for learners with intellectual disabilities.

▼ Speaker



David Feikes

Professor Purdue University Northwest

"You Do, We Do, I Do" in STEM Classrooms: Active Student Learning Top 10 **Ideas Building Thinking Classrooms and Mathematical Mindsets**

2 4:00 PM - 4:45 PM, Feb 18

♀ Grand 8

Interdisciplinary (i.e. STEM)

Middle Level 6-8 | High School 9-12 | General

You Do, We Do, I Do is a teaching strategy that transitions the responsibility of learning from the teacher to the student. Discover how engaging activities, discussions, and hands-on experiences foster deeper understanding, critical thinking, and collaboration.

📢 Speaker



Alan Zollman

Professor Indiana University Southeast

Re-Thinking the STEM Pipeline

② 4:00 PM - 4:45 PM, Feb 18

♀ Veterans 2

Interdisciplinary (i.e. S...

This session will look at opportunities to develop STEM identities in all learners using Universal Design for Learning and Culturally-Relevant Pedagogy.

▼ Speaker



Ryan Murray Other Keep Indiana Learning

It's Phenomenal! Using Real-World Connections to Support Three Dimensional Learning

② 4:00 PM - 4:45 PM, Feb 18

♀ Veterans 3

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

Explore the purpose of phenomena, the power of using it to drive your instruction, and the way it will support your students.

♥ Speaker



Greg Sloan Curriculum Specialist Savvas Learning Company

6:00 PM

Sneak Preview of Exhibit Hall

② 6:00 PM - 8:00 PM, Feb 18

Mon, Feb 19, 2024

7:00 AM

Registration

② 7:00 AM - 4:00 PM, Feb 19

♀ Atrium

7:15 AM

Continental Breakfast

② 7:15 AM - 8:00 AM, Feb 19

♀ Atrium

Join us for a grab and go breakfast!

8:00 AM

Is this your first time at HASTI?

② 8:00 AM - 8:45 AM, Feb 19

♀ Veterans 4

Elementary K-5 Middle Level 6-8 High School 9-12 General

Learn how to navigate the HASTI conference by learning tips to make your experience meaningful.

▼ Speaker



Craig Williams

Using Interactive STEM Cases to Power Up Thinking!

② 8:00 AM - 8:45 AM, Feb 19

♥ Indianapolis A

Interdisciplinary (i.e. STEM) Middle Level 6-8 High School 9-12

Gizmos are proven solution that provides a deep and personalized learning experience for students that allow them to apply STEM concepts and make connections between the classroom and the world around them.

📢 Speaker



Patty Low Curriculum Consultant ExploreLearning

A Few of my Favorite Chemistry Things

② 8:00 AM - 8:45 AM, Feb 19

♥ Indianapolis B

Chemistry High School 9-12 College

I will share some of my favorite chemistry introductory, conceptual, and review activities. Join me for instructions, how-tos, and tips/tricks for using these activities.

▼ Speaker



Heather Jackson

Teacher

Danville Community High School

The Fires of 1871: the Chicago, Peshtigo, and Michigan

② 8:00 AM - 8:45 AM, Feb 19

Ecology/Environmental Science General

Thousands of people lost their lives in these 1871 fires, with millions of dollars of property and millions of acres of land burned. Though the exact causes of all the fires are unknown, the weather conditions and human circumstances combined to supply an environment conducive to disaster

📢 Speaker



James Hollenbeck

Professor Indiana University Southeast

Bringing the JOY of Learning to the Classroom!

② 8:00 AM - 8:45 AM, Feb 19

♥ Indianapolis D

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

High School 9-12

Come learn how to engage your students and bring the JOY to learning STEM in elementary classrooms through a simple easy to use method!

♥ Speaker



Douglas Hunnings

STEM Specialist & Director of Inquiry Services ETHOS Innovation Center

Don't Believe Everything You Believe!

② 8:00 AM - 8:45 AM, Feb 19

♀ Veterans 3

Science Education General

The Generation Skeptics curriculum fosters an understanding of the world through inquiry-based learning. We provide free materials to complement existing science and educational programs.

♥ Speaker



Katie Clemmons Educator

Endeavor Charter School

9:00 AM

Reaching More Students in Less Time

② 9:00 AM - 9:45 AM, Feb 19

♀ Freedom

Join me to teach differently than how we were taught AND differently than how we were taught to teach math. Let's shift the focus from memorizing / mimicking to reasoning and math-ing. And get results. Math is Figureoutable!

📢 Speaker



Pam Harris

10:00 AM

Connect and Respect = Change We Can Believe In

2 10:00 AM - 10:45 AM, Feb 19

∇ Kennedy/Reagan

Interdisciplinary (i.e. STEM)

Elementary K-5

Middle Level 6-8

High School 9-12

Are you drowning in behavior plans, documentation and interruptions? Reduce disruptive behavior and increase achievement with our practical strategies. Learn how we went from individual behavior plans for 28% of our students to ONLY 4% while increasing achievement.

♥ Speaker



Steve Troehler

Teacher and Admin Mentor Forest Hills School District

Feeding the World with Science

2 10:00 AM - 10:45 AM, Feb 19

Science Education General

With a global population nearing 10 billion by 2050, discover how science tackles the challenge of feeding our world's growing population.

♥ Speaker



Grasping Innovation: Engineering Hydraulic Claws in STEM Classrooms

2 10:00 AM - 10:45 AM, Feb 19

♥ Indianapolis B

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

High School 9-12

Design and build a hydraulic claw that can pick up space trash, gather samples, or load materials in a series of challenges.

▼ Speaker



Amber Hudson

Vice President of Education Services 1st Maker Space

Encourage curiosity, spark inquiry: Teach students to ask their own questions

② 10:00 AM - 10:45 AM, Feb 19

♥ Indianapolis C

Science Education

High School 9-12

The Question Formulation Technique (QFT) will be explored in a hands-on, educator-to-educator training session on teaching students to ask their own questions.

♥ Speaker



Maureen McGrail

Science Content Director AP-TIP University of Notre Dame

Mathematical Problem Solving for All Students

② 10:00 AM - 10:45 AM, Feb 19

♥ Indianapolis D

Interdisciplinary (i.e. STEM) Middle Level 6-8 High School 9-12

This session will highlight several engaging strategies such as Three Reads, Numberless Word Problems, and more!

♥ Speaker



Margo Dye STEM Coach/Specialist

Accelerate Learning

Understanding the 2023 IAS for Math and How They Relate to the State **Assessments**

② 10:00 AM - 10:45 AM, Feb 19

♀ Indianapolis E

Middle Level 6-8 High School 9-12 Mathematics

A Crosswalk comparing the 2020 IAS, 2023 IAS, and the CCSS for Math, how the standards are assessed on State Assessments, and wording changing in the 2023 IAS for Math will be provided. What standards must be taught for students to be successful will be shown.

▼ Speaker



Bill Reed Consultant **INcompassing Education**

Process > Product

② 10:00 AM - 10:45 AM, Feb 19

♀ Grand 8

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

High School 9-12 General

Teacher Educators

Join @Dr LeDune for an entertaining and enlightening journey of theories, models, and practices of fostering academic, social, and life skills through inquiry-based instructional methods.

♥ Speaker



Dr. Chad LeDune

STEM Coach Southwest School Corporation

Solar Eclipse & Wildlife

2 10:00 AM - 10:45 AM, Feb 19

♀ Veterans 1

Life Science Elementary K-5 Middle Level 6-8

High School 9-12

Activities to explore Indiana wildlife behavior during a solar eclipse

♥ Speaker



Kathy Madren

Education Outreach Specialist DNR Division of Fish & Wildlife

COVID-19, eLearning, the Digital Divide and Underprivileged Children

② 10:00 AM - 10:45 AM, Feb 19

♀ Veterans 2

Interdisciplinary (i.e. STEM) General

The pressure students feel from not having access to the technology they need leads to academic decline. Students with lower socio-economic status and limited access to eLearning and technology were unable to complete their homework or receive an adequate education.

▼ Speaker



James Hollenbeck

Professor Indiana University Southeast

Evolution for Middle School Educators

② 10:00 AM - 10:45 AM, Feb 19

♀ Veterans 3

Biology Life Science High School 9-12

Teach evolution with confidence! Participants will receive a free unit of materials, including many with K12 Indiana Academic Standards active learning ideas.

▼ Speaker



Katie Clemmons Educator Endeavor Charter School

Make Them Curious Again

② 10:00 AM - 10:45 AM, Feb 19

♀ Veterans 4

Science Education

Elementary K-5

Middle Level 6-8

High School 9-12

Build a classroom where curiosity is the focus.

♥ Speaker



Robin Coffman

Biology & AP Biology Teacher Whitko Jr./Sr. High School

A Week in Hawaii with Dr. Peter Liljedahl

② 10:00 AM - 10:45 AM, Feb 19

♀ Grand 6

Middle Level 6-8 High School 9-12 Mathematics

Come join us as we take you on our journey shadowing Dr. Peter Liljedal as he spends 3 days in the classroom with students at Mckinley High School, Honolulu HI. We will share our incredible observations, insightful conversations, and lifelong lessons learned from this once in a lifetime adventure. Then we will share the impactful shifts that were implemented as a result of our experiences along with the successes and bumps in the road encountered along the way.

▼ Speakers



Candy Miller

High School Math Teacher Franklin Community Schools



Hailey Anderson-Roberts

High School Mathematics Teacher Franklin Community Schools



Melisa McCain

Instructional Coach Franklin Community Schools

11:00 AM

Creating Curious Classrooms in Indiana: K-12 Science

② 11:00 AM - 11:45 AM, Feb 19

♥ Indianapolis B

Science Education

Elementary K-5 Middle Level 6-8

In this session, discover how phenomena-based science instruction can promote student curiosity and maximize learning while supporting Indiana State Academic Standards for Science.

Brad Fountain, Senior Director of Teaching & Learning, Discovery Education

▼ Speaker



Brad Fountain

Senior Specialist, Regional Marketing & Events Discovery Education

Promoting Equity and Diversity in Your Classroom

② 11:00 AM - 11:45 AM, Feb 19

♥ Indianapolis C

Science Education

High School 9-12

Do you believe that education changes lives and that the safety and health of students are critical parts of education this workshop might be for you.

♥ Speakers



Kady Lane

Past Board Director HASTI (Hoosier Association of Science Teachers Inc.) District 8 Director HASTI and Indiana University



Stephanie Crook

Teacher

Looking for Patterns in Species Diversity

② 11:00 AM - 11:45 AM, Feb 19

♀ Indianapolis D

Life Science High School 9-12

Look for patterns in species diversity in coral reef ecosystems and other animals to determine cause and effect relationships and understand how ecosystem interactions affect patterns of biological diversity.

📢 Speaker



Billee Procknow

Marketing and Events Manager Lab-Aids

Solar Eclipse 101 - Everything You Need to Know!

② 11:00 AM - 11:45 AM, Feb 19

♀ Veterans 1

Earth/Space Science General

Join Rick Crosslin to explore eclipse using various emonstrations, classroom activities, and strategies and lessons learned from the 2017 Great American Total Eclipse.

♥ Speaker



Rick Crosslin

Scientist in Residence MSD Wayne Township Schools

Climate Change in Your Own Backyard

② 11:00 AM - 11:45 AM, Feb 19

♥ Veterans 2

Biology Life Science High School 9-12

Engage in activities and leave with a complete lesson from the National Center for Science Education about the relationship between climate change and severe weather.

📢 Speaker



Jeremy Cook Science Teacher Carmel High School

The Mitosis and Meiosis Board Game

② 11:00 AM - 11:45 AM, Feb 19

Veterans 4



Life Science High School 9-12

Workshop participants will receive instructions and materials to construct The Mitosis and Meiosis Board Game components and materials for use in their own biology classes.

♥ Speaker



Joe Ruhl Speaker and Author Lafayette Jefferson High School (retired)

Lunch A

② 11:00 AM - 12:00 PM, Feb 19

♀ Grand Ballrooms 1-7

Choose either lunch A or B and be sure to take time to visit the exhibit hall! Lunch is from 11:00-1:00 daily.

Bringing STE(A)M to Middle/High school classrooms with agar art and bioplastic

2 11:00 AM - 11:45 AM, Feb 19

Biology Interdisciplinary (i.e. STEM)

Middle Level 6-8

This STEAM workshop introduces teachers with no prior biotechnology or lab experience to the exciting world of biotechnology by focusing on agar art and sustainable bio-based materials. Through presentation and hands-on activities, attendees will discover an entire ecosystem of content, hands-on activities, and tools that allow you to bring engaging, industry-relevant content and skill-building into your classroom - science, visual arts, design technology, or other.

Attendees will participate in an activity of implementing hands-on biotechnology exercises in the classroom: not only will you learn about the logistics of classroom implementation, but you will get to practice the activity just like your students would.

The hands-on activities will center on creating agar art (biology-based art): after having completed a virtual interactive simulation of the activity, you will be making agar Petri dishes (the "houses and food" that bacteria grow on), streaking safe, colorful bacteria onto the Petri dishes and creating your own living painting! Set-up, clean-up, and safety lessons will also be a part of the learning journey. Experience all the activities your students would do in an actual classroom! This session will conclude by providing attendees with links and takeaways in the form of easy-to-use lesson guides (developed by Mindfuel.ca) so that this and other biotechnology experiences can be brought back to your classrooms. No prior biotechnology experience or laboratory experience is required - if you can cook an egg, you can do biotechnology. Your school does not need to have a dedicated lab space - these activities can be done in any classroom or common room.

📢 Speaker



Julie Legault

12:00 PM

Lunch B

② 12:00 PM - 1:00 PM, Feb 19

♀ Grand Ballrooms 1-7

Choose either lunch A or B and be sure to take time to visit the exhibit hall! Lunch is from 11:00-1:00 daily.

How We Grade in a Thinking Classroom

② 12:00 PM - 1:45 PM, Feb 19

♀ Grand 8

High School 9-12 Middle Level 6-8 EXTENDED WORKSHOP

Chapter 14 of Peter Liljedahl's book, Building Thinking Classrooms focuses on how we can effectively grade students in a thinking classroom. In this session, we will explore how teachers can begin to easily transition from points-based grading to outcomes-based grading. In addition, to make this transition seamless, Melisa will share the free digital grading rubric designed in collaboration with Tim Brzezinski and through consultation with Peter Liljedahl. Participants will be shown how to use the Google Sheets application that automates the grading process exactly the way Peter describes in his text.

▼ Speakers



Melisa McCain

Instructional Coach Franklin Community Schools



Caleb Sinzinger

Middle and High School Math Teacher Franklin Community Schools

The Power of Multiyear Professional Development: Reinvigorating Teaching and Learning of Mathematics in One District

② 12:00 PM - 12:45 PM, Feb 19

♀ Veterans 5

General Mathematics

During this presentation, participants will first learn about the planning and implementation of a three-year professional development plan. This will include what the roles of the consultant, administrators, and teachers were throughout implementation. Participants will learn of the design of each year's professional development sessions, and how the consultants, school administrators, and district administrators worked together to differentiate based on teachers and grade level needs. After that, participants will engage in three different activities that took place to increase teacher efficacy and mathematical content knowledge while also modeling mathematical pedagogical practices in classrooms. Finally, participants will learn about the results of the threeyear professional development plan. Districtwide, students made noticeable and quantifiable improvement in standardized tests. Additionally, there is anecdotal and qualitative evidence of reinvigorating teachers and even extending careers beyond retirement announcements. As well, numerous teachers and students vocalized that they like teaching and learning math for the first time. Participants will hear firsthand from the consultant, teachers, and administrators to understand the breadth and depth of the entire professional development experience.

▼ Speakers



Courtney Flessner Consultant

Keep Indiana Learning



Lindsey Thompson

Professional Development Director Deleware Community Schools

1:00 PM

Developing Conceptual Explanations for Elementary Grades

② 1:00 PM - 1:45 PM, Feb 19

♀ Freedom

Elementary K-5 Mathematics

Teachers often explain content to students. However, not all explanations are meaningful. We will discuss research-based practices for creating conceptual explanations and when it is best to give a conceptual explanation instead of letting students discover the concept for themselves.

♥ Speaker



Mark Creager

Associate Professor University of Southern Indiana

Pythagorean Theorem: Investigations Using Desmos

② 1:00 PM - 1:45 PM, Feb 19

∇ Kennedy/Reagan

Middle Level 6-8 High School 9-12 Mathematics

♥ Speaker



Ben Dillon

St. Joseph High School

Creating Regionally Relevant Units/Lessons

② 1:00 PM - 1:45 PM, Feb 19

♥ Indianapolis A

Interdisciplinary (i.e. STEM) Middle Level 6-8

How to modify pre-existing curricular resources to create locally relevant instruction.

♥ Speaker



Teresa Rockwood

Science Curriculum Specialist Kendall Hunt

IABT Quick Hits

② 1:00 PM - 1:45 PM, Feb 19

? Indianapolis B



Biology Life Science Elementary K-5 Middle Level 6-8 High School 9-12

Teachers from across the state will quickly present lesson / labs that have worked well in their classroom.

▼ Speaker



Katy Hinesley

Teacher - IABT President Indiana Association of Biology Teachers (IABT)

Beyond Memorizing Formulas: Leveraging Social Justice to Foster Flexible **Thinking in Mathematics**

② 1:00 PM - 2:45 PM, Feb 19

♥ Indianapolis C

Elementary K-5 Interdisciplinary (i.e. STEM)

Middle Level 6-8

Explore innovative strategies for pushing all students to go beyond formula memorization. Learn to integrate social justice principles to promote flexible, adaptable thinking in math education. Empower students with creativity and critical thinking skills through interactive examples and discussions. Leave the session with practical strategies to put in practice.

Speaker



Katrice Quitter

Head of Partnerships thinkLaw

The Algebra / Finance Connection: Real-World, Real-Math, Real-Interest

② 1:00 PM - 2:45 PM, Feb 19

College

High School 9-12 Interdisciplinary (i.e. STEM) Teacher Educators

Learn ways to embed financial applications in HS math courses and in an Advanced Algebra with Financial Applications course. The math will be explored in the contexts of discretionary expenses, banking, credit, auto ownership, employment, taxes, housing, investing, entrepreneurship, retirement, and budgeting.

♥ Speaker



Richard Sgroi

Secondary Mathematics Educator/Curriculum Coordinator Bedford Schools

Media Materials to Aid YOU in Teaching About Eclipses

② 1:00 PM - 1:45 PM, Feb 19

♥ Veterans 1

Earth/Space Science General

Want to teach about the eclipse but don't have time to look up resources? Let me help with those I use in Astronomy!

▼ Speaker



Tina Harris

Teacher

Bedford North Lawrence High School

Conservation Educator Academy at the Indianapolis: What's Coming in Summer 2024?

② 1:00 PM - 1:45 PM, Feb 19

♀ Veterans 4

Ecology/Environmental Science General

Find out what the Indianapolis Zoo and Ball State's science educators have planned for the 2024 Conservation Educator Academy, A Summer PD Program for Teachers.

▼ Speakers



Tom J. McConnell The Hoosier Science Teacher Advisory Board Ball State University



Tolly Foster Education Programs Manager Indianapolis Zoo

An Introduction to Future-Focused Mathematics: An Overview of the 2023 Streamlined and Prioritized Mathematics Standards

② 1:00 PM - 1:45 PM, Feb 19

♀ Veterans 5

Join IDOE for an overview of the 2023 mathematics standards, including domain and content shifts, classroom considerations, and resources for implementation. Participants will take a closer look at updated resources including mathematics frameworks, correlation and vertical articulation guides, and other supporting documents.

📢 Speaker



Dana Hartzell Elementary STEM Specialist Indiana Department of Education

AI in K12

② 1:00 PM - 1:45 PM, Feb 19

▼ Speaker



Olgun Sadik Lecturer Indiana University

2:00 PM

Children's Literature in the Elementary Mathematics Classroom

② 2:00 PM - 2:45 PM, Feb 19

♥ Freedom

Elementary K-5 Mathematics

Educators often use children's literature to teach reading and writing. However, there are many excellent books that tie to the teaching of mathematics as well! This session will introduce attendees to a plethora of picture books as well as the ways these books can be used to make mathematical connections for students.

📢 Speaker



Ryan Flessner Professor of Teacher Education **Butler University**

Grading in a Thinking Classroom

2:00 PM - 2:45 PM, Feb 19

∇ Kennedy/Reagan

Elementary K-5 Middle Level 6-8 High School 9-12 Teacher Educators

You've built a thinking classroom and kids are loving learning on their feet. They're talking more, collaborating more, and you love it, too. But how do I put that learning in the gradebook? In this session we'll investigate some solutions and discover what's possible to grade equitably in a thinking classroom.

▼ Speaker



Jeff Harker

Professional Learning Specialist Keep Indiana Learning

Encouraging Environmental Curiosity and Discovery with Envirothon

2:00 PM - 2:45 PM, Feb 19

Interdisciplinary (i.e. STEM) High School 9-12 College

Teachers will share lesson plans and activities they use to prepare their high school students for the Indiana Envirothon competition and share how to bring a team to the 2024 event.

▼ Speaker



Teddie Phillipson-Mower

Indiana University

What's the T? Digital Innovation in STEM is More Than Tech Tools!

② 2:00 PM - 2:45 PM, Feb 19

♥ Indianapolis B

Interdisciplinary (i.e. STEM) General

Take the challenge to become a true STEM innovator in this hands-on, digital learning session. The "T" is the development and implementation of engaging, purposeful technology that empowers students to develop a love for science and provide access to learning that would otherwise not be possible!

▼ Speaker



Gregg Ritchie STEM Product Specialist Amplify Education

Growing in Advocacy for Elementary Math

② 2:00 PM - 3:45 PM, Feb 19

Grand 8

Elementary K-5 EXTENDED WORKSHOP

Teacher Leaders are powerful change-makers in elementary schools. This session will focus on key moves teacher leaders can make as they grow in their own leadership and advocacy for high-quality math instruction for all learners.

📢 Speaker



Jessica Miller Professional Learning Specialist Keep Indiana Learning

Integrating History & Science in Educating about the Eclipse

2:00 PM - 2:45 PM, Feb 19

♥ Veterans 1

Earth/Space Science

Middle Level 6-8

In this session, we'll discuss ways to integrate history and science in lessons surrounding the eclipse and share our work on exploring the history of Indiana through eclipses and their related science.

📢 Speaker



Sarah Reynolds

Assistant Professor, Dept. of Physics & Earth-Space Science University of Indianapolis

Space Mining Challenge

② 2:00 PM - 3:45 PM, Feb 19

♥ Veterans 2

High School 9-12 Interdisciplinary (i.e. STEM) EXTENDED WORKSHOP

Design and build an electromagnetic crane to mine minerals from an asteroid and load them into your spacecraft!

https://www.canva.com/design/DAFuJpqblFg/5GGLnSMyqjM77qTvt_uJEg/view? utm_content=DAFuJpqblFg&utm_campaign=designshare&utm_medium=link&utm_source=publishsharelink

♥ Speakers



Megan Ewing

Professional Development Specialist 1st Maker Space



Amber Hudson

Vice President of Education Services 1st Maker Space

Composting with Worms (supplies available for 25 compost bins)

2:00 PM - 2:45 PM, Feb 19

♥ Veterans 3

Ecology/Environmental Science General

Attendees will construct a vermicompost (worm) bin during the presentation that they can keep in their classroom which can be used for ongoing education.

▼ Speakers



Jessica Irvine

Environmental Education and Outreach Coordinator Indiana Department of Environmental Management



Jennifer Woolson-Helrigel

STEAM Cheap, Simple, and in a Snap!

② 2:00 PM - 3:45 PM, Feb 19

♀ Veterans 4

Elementary K-5 High School 9-12 Interdisciplinary (i.e. STEM)

Middle Level 6-8

EXTENDED WORKSHOP

This session will present ideas for 3 quick, inexpensive, and classroom-tested STEAM ideas for all levels. Handouts are provided; kits will be given out.

▼ Speakers



Shannon Hudson

Crawfordsville Middle School



Doug Hudson

Greencastle High School

Bridging Mathematics the Gap: Making the Shift from the 2020 to the 2023 **Standards**

② 2:00 PM - 2:45 PM, Feb 19

♀ Veterans 5

High School 9-12 Mathematics

Wondering how to make the shift from the 2020 mathematics standards to the 2023 standards? Join IDOE in a working session to identify shifts in mathematics content and build bridges to avoid possible learning gaps using newly updated resources. Participants should bring a fully charged device, have an Indiana Learning Lab account, and be ready to dive into their grade-level or course standards.

▼ Speakers



Dana Hartzell

Elementary STEM Specialist Indiana Department of Education



Heidi Shultz

Secondary Mathematics Specialist Indiana Department of Education

3:00 PM

Fluency with Multi-Digit Numbers

② 3:00 PM - 3:45 PM, Feb 19

♀ Freedom

Elementary K-5 Mathematics

Once students are fluent with their basic math facts, it's important to transfer that knowledge to multi-digit computation. This session will engage participants in connecting to - and moving beyond - basic math facts as students engage in solving problems with multi-digit numbers.

📢 Speaker



Ryan Flessner Professor of Teacher Education **Butler University**

Before --> During --> After: Implementing a Problem-Based Curriculum

② 3:00 PM - 3:45 PM, Feb 19

♥ Kennedy/Reagan

▼ Speaker



Michael Roach Mathematics Facilitator Indianapolis Public Schools

Harnessing the Power of Simulations in Science Education

② 3:00 PM - 3:45 PM, Feb 19

Biology Life Science Elementary K-5 Middle Level 6-8

By harnessing the power of simulations and combining them with instructional best practices, teachers can create dynamic 3D learning experiences that empower students to ask questions, analyze data, and construct explanations.

▼ Speaker



Patty Low Curriculum Consultant ExploreLearning

Fostering Math Discourse and Engagement with Language Routines

② 3:00 PM - 3:45 PM, Feb 19

♥ Indianapolis B

Interdisciplinary (i.e. STEM)

Utilize proven and teacher-created instructional routines to build engagement with students, and more willing to share, participate... and even mess up!

♥ Speaker



Gregg Ritchie STEM Product Specialist Amplify Education

Why We Shouldn't Teach the Way We were Taught

② 3:00 PM - 3:45 PM, Feb 19

Science Education Middle Level 6-8

The latest research in approaches to teaching and learning that supports strategies that can be used in the classroom.

♥ Speaker



Kelly Sparks Associate Professor, Teacher Education University of Southern Indiana

BTC Across the Curriculum

② 3:00 PM - 3:45 PM, Feb 19

♀ Indianapolis E

Elementary K-5 General High School 9-12 Middle Level 6-8

Have you ever wondered how to implement BTC practices outside of the math classroom? Let us show you through a hands-on presentation where we will model how to utilize BTC practices in various content areas. We will be modeling how to implement the Building Thinking Classroom practices in other content areas outside of math. We will work through the 4 toolkits focusing on different ones with the different contents. We will be modeling these through sample lessons where teachers will be acting as the students in the lesson. They will be up and working at vertical non-permanent surfaces.

▼ Speakers



Melisa McCain

Instructional Coach Franklin Community Schools



Katie Sinzinger

Instructional Coach Franklin Community Schools

Preparing for the Solar Eclipse in the Science Classroom

② 3:00 PM - 3:45 PM, Feb 19

♀ Veterans 1

Earth/Space Science | High School 9-12

We will present around 15 lessons/labs around the content behind the solar eclipse.

▼ Speakers

Bill Bayley

Director of Science K-12 Outreach Purdue University



Steve Smith

Purdue University - K-12 Science Outreach



Sarah Nern



David Sederberg

Claim-Evidence-Reasoning (CER): Are you CERtain Your Students Understand the Data?

② 3:00 PM - 3:45 PM, Feb 19

♀ Veterans 3

Science Education High School 9-12

Experience how CER supports multiple elements in our science and math platforms, interact with exemplary CER responses relating to hands-on investigations.

♥ Speaker



Margo Dye STEM Coach/Specialist Accelerate Learning

4:00 PM

Using Wicked Problems in Agriculture to Engage Students in Plant Science and **Biotechnology**

2 4:00 PM - 4:45 PM, Feb 19

Veterans 4

Biology Life Science High School 9-12

Experience hands-on activities in plant science and biotechnology from the free resources on NourishTheFuture.org. These activities engage students through the lens of agriculture.

♥ Speaker



Heather Bryan

Nourish the Future - Education Projects

ICTM Business Meeting

② 4:00 PM - 5:00 PM, Feb 19

♀ Veterans 5

HASTI Awards Program

2 4:00 PM - 5:00 PM, Feb 19

♀ Veterans 2

Join us as we celebrate the recipients of this years HASTI awards! Light refreshments will be provided.

4:30 PM

Sponsored Event

4:30 PM - 6:30 PM, Feb 19

♀ Atrium

7:30 PM

BYOB (Bring Your Own Board Games) Night!

② 7:30 PM - 10:00 PM, Feb 19

♀ Atrium

Join us for light snacks and bring your favorite board games to share with others! This is a come and go event, so stay as long as you are able and join in the fun of playing a variety of games! All games welcome, this event is not just limited to board games!

Tue, Feb 20, 2024

7:00 AM

Registration

② 7:00 AM - 12:00 PM, Feb 20

♀ Atrium

7:15 AM

Continental Breakfast

② 7:15 AM - 8:00 AM, Feb 20

♀ Atrium

Join us for a quick grab and go breakfast!

8:00 AM

Blending SEL into Math Class Activities

② 8:00 AM - 8:45 AM, Feb 20

♀ Freedom

Attendees will receive information on the five SEL competencies and how to seamlessly incorporate them into math classroom activitie. Example activities will be presented.

▼ Speaker



John Riley

The Hoosier Science Teacher Journal: Write, Review, and Participate

② 8:00 AM - 8:45 AM, Feb 20

♥ Kennedy/Reagan

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8

The ultimate professional development! Publish an article and participate in the editorial process. We will show you how.

♥ Speaker



Teddie Phillipson-Mower

Indiana University

Teaching Human Ecology with 3D Models and Simulations

② 8:00 AM - 8:45 AM, Feb 20

Ecology/Environmental Science

High School 9-12

Engage in three-dimensional learning with hands-on activities to explore human population, biodiversity, climate change, land and natural resource use, and paths to sustainability.

▼ Speaker



Norman Leonard

Teacher

Ben Davis University High School

Nature Engagement through Connections to Conservation

② 8:00 AM - 8:45 AM, Feb 20

♥ Indianapolis B

Ecology/Environmental Science Elementary K-5 Middle Level 6-8

Link your learners to nature with connections to conservation. The Indianapolis Zoo will engage you in creating meaningful connections to field conservation, near and far.

♥ Speakers



Tolly Foster

Education Programs Manager Indianapolis Zoo



Laurie Christie

What if your students could predict the weather?

② 8:00 AM - 8:45 PM, Feb 20

♀ Indianapolis C

Science Education

General

Learn how regular and intentional nature journaling can cultivate healthy, happy, creative students.

Speaker



Danielle Racke

Explore Nature By Nurture LLC

Engaging Middle School Students in Insect Taxonomy with Augmented Reality (AR)

② 8:00 AM - 8:45 AM, Feb 20

♥ Indianapolis D

Middle Level 6-8 Life Science High School 9-12

Traditional methods of teaching taxonomy rely on 2D static images of organisms that students learn how to identify using a dichotomous key tool. However, such methods do not effectively convey taxonomic concepts in a manner that engages student interest, nor do they encourage further scientific inquiry (Wu & Wu, 2020). To address this concern, the team, led by Dr. Victoria Lowell, along with two PhD students, Stuart White and Anthony Ilobinso, and myself, pursued funding to support a vision we had of improving the learning of taxonomy and classification. Our goal was to provide students with an authentic learning experience of taxonomy by having them observe and interact with the insects through augmented reality (AR).

♥ Speaker



Kevin Jones

Indiana Mathematics Leadership Academy: The Role of a Mathematics **Instructional Leader**

② 8:00 AM - 8:45 AM, Feb 20

♥ Indianapolis E

Elementary K-5 Middle Level 6-8 High School 9-12

What's an instructional leader in mathematics and how does one embrace that role when they don't perceive themselves a content expert? In this session, participants will ponder the role of leadership in mathematics and how to build leadership efficacy.

📢 Speaker



Courtney Flessner Consultant Keep Indiana Learning

Positioning Yourself for Success: The Imperative for AI Literacy in K-12 Schools

② 8:00 AM - 8:45 AM, Feb 20

♀ Grand 8

Interdisciplinary (i.e. STEM)

Elementary K-5 Middle Level 6-8

High School 9-12

In the age of artificial intelligence, the rapid rate of advances in technology make it difficult to keep up. Not only are there tools and resources to evaluate and consider, but there are also implications for preparing students to be knowledgeable and competitive in this new era. Join this session to discuss what this means for K-12 schools in terms of decision-making and planning around the use of artificial intelligence in schools and classrooms.

▼ Speaker



Dana Calfee

Indiana Department of Education

Parachutes plus Young Students: A STEM Activity which includes Reading

② 8:00 AM - 8:45 AM, Feb 20

♀ Veterans 1

Interdisciplinary (i.e. STEM) Elementary K-5

In this STEM activity student groups design, build, test, and analyze parachute models, as well as read and discuss two books.

▼ Speaker



Suzanne Cunningham

Other

Purdue University

Opportunities in Aquatic Sciences, Forestry, and Wildlife from the Department of Forestry and Natural Resources at Purdue University

② 8:00 AM - 8:45 AM, Feb 20

♥ Veterans 2

Ecology/Environmental Science | Elementary K-5 | Middle Level 6-8 | Pre-Elementary Pre-K-2nd

Learn about the field ecology majors, and outreach presentations that can be offered in your classroom, from the Purdue Department of Forestry & Natural Resources.

▼ Speakers



Megan Gunn

Purdue University - Department of Forestry and Natural Resources

Julie Pluimer

Assistant Director Purdue University

Preparing Students for a Changing World - Lessons in Climate Change

② 8:00 AM - 8:45 AM, Feb 20

♀ Veterans 3

Ecology/Environmental Science Middle Level 6-8 High School 9-12

Lessons and resources I incorporate to try to help students grasp the impact of climate change and severe weather events on their lives.

♥ Speaker



Tina Harris

Teacher

Bedford North Lawrence High School

You Design It

② 8:00 AM - 8:45 AM, Feb 20

♀ Veterans 4

Life Science General

Educators will learn how to Give Students opportunities to Design their own Lessons as groups, as a great review/co-teaching tool, after covering class content.

📢 Speaker



Dr Deborah Daniels

Science Teacher Pike High School / MSD of Pike Township

BTC Across the Curriculum

② 8:00 AM - 8:45 AM, Feb 20

♀ Veterans 5

Elementary K-5 Middle Level 6-8 High School 9-12 Mathematics General

Have you ever wondered how to implement BTC practices outside of the math classroom? Let us show you through a hands-on presentation where we will model how to utilize BTC practices in various content areas. We will be modeling how to implement the Building Thinking Classroom practices in other content areas outside of math. We will work through the 4 toolkits focusing on different ones with the different contents. We will be modeling these through sample lessons where teachers will be acting as the students in the lesson. They will be up and working at vertical non-permanent surfaces.

Speakers



Mandy Ramey

Instructional Coach Franklin Community Schools



Amanda Ray

5th GradeTeacher & PLC Lead Franklin Community Schools

9:00 AM

Using the Solar Eclipses to Encourage Lifelong, Lifewide and Lifedeep Science **Interest**

② 9:00 AM - 9:45 AM, Feb 20

♥ Freedom

Award-winning science educator Dennis Schatz examines the research regarding when and where science learning occurs, when it is most important for developing a future interest in science, and the implication for learning experiences related to the upcoming total eclipse.

▼ Speaker



Dennis Schatz

10:00 AM

The Urban Immersion Internship: Learning to Engage with Students from Diverse **Backgrounds and Their Mathematics**

② 10:00 AM - 10:45 AM, Feb 20

♀ Freedom

Elementary K-5 Mathematics Teacher Educators

We discuss the impact of a semester-long immersive experience for elementary pre-service teachers in a large, Urban school district the semester prior to student teaching.

♥ Speakers



Jerry Woodward

Associate Professor of Mathematics Education Ball State University



Veronica Fife-Demski

Assistant Professor in Elementary Educatio Ball State University

Leverage Formative Assessment in the Elementary Classroom

② 10:00 AM - 10:45 AM, Feb 20

∇ Kennedy/Reagan

Elementary K-5 Mathematics

In this session I will share a variety of formative assessment methods that can be used in the Elementary Mathematics classroom. These will include observations, interviews, quick-checks, and tasks for assessment. I will share a variety of methods and then invite participants to share about some of their favorite and most effective formative assessments.

♥ Speaker



Christine Taylor

Assistant Professor, Mathematics Education Indiana State University

Designing Three Dimensional Assessments to Maximize Instruction of the IAS 2023 **Science Standards**

② 10:00 AM - 10:45 AM, Feb 20

♥ Kennedy/Reagan

Implementing computers science core practices in every classroom

② 10:00 AM - 10:45 AM, Feb 20

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8 High School 9-12 General

Explore how the nationally-recognized computer science core practices and CS teaching pedagogy is transferable to all subjects and problem solving domains.

♥ Speakers



Kerry Sensenbrenner

Computer Science Professional Development Specialist Nextech



Jenna Garcia

Other Nextech

Science and Student Identity

② 10:00 AM - 10:45 AM, Feb 20

Science Education General

This presentation covers information on how students' science identities (and identities in general) can impact student learning and engagement.

▼ Speaker



Krystal Brand

Assistant Instructor of Education ШРШ

Inspire and empower students through citizen science in the outdoors

② 10:00 AM - 10:45 AM, Feb 20

♥ Indianapolis C

Ecology/Environmental Science Elementary K-5 Pre-Elementary Pre-K-2nd

Regular and intentional outdoor education can raise overall wellness and academic performance. Learn how to get

📢 Speaker



Danielle Racke

Other

Explore Nature By Nurture LLC

Educating for Environmental Change

② 10:00 AM - 10:45 AM, Feb 20

Earth/Space Science

Science Education Ecology/Environmental Science

Learn about Educating for Environmental Change, a free Indiana University program that helps educators teach the science and policy of climate change and participate in exemplar activities.

This workshop will introduce Indiana University's Educating for Environmental Change (EfEC) program and provide information on how teachers can get involved. The presenter will also facilitate hands-on, exemplar activities from the EfEC program that are designed to engage students in the practice of scientific argumentation utilizing research-based pedagogy. Surfacing student thinking and addressing student misconceptions will also be emphasized. The presenter will align the workshop activities to Indiana and Next Generation Science Standards.

EfEC is a free, grant-funded professional development program for K-12 educators that helps teach the science and policy of climate change. The EfEC program aids teachers to help overcome barriers to teaching climate change by elucidating and deepening understanding of environmental science issues through hands-on labs and activities co-developed by Indiana University's Department of Earth and Atmospheric Sciences, the School of Education, WonderLab Museum, and veteran K-12 science teachers. EfEC programs are guided by the following driving questions: how do we know the climate is changing; how are humans accelerating these changes; what are the impacts of these changes; and what can be done moving forward?

▼ Speaker



Adam Scribner

Other Indiana University

The Thinking Classroom and Exemplars Performance Tasks

② 10:00 AM - 10:45 AM, Feb 20

Elementary K-5 Mathematics

Join me as we model and explore using Exemplars performance tasks framed within a "Thinking Classroom." We'll practice launching a task, and understanding how to mobilize thinking using random groups and vertical thinking spaces, all while practicing the 5+1 Practices for Orchestrating Productive Discussions. I'll offer the next steps, with sample performance tasks you can use it in your classroom.

📢 Speaker



Brendan Scribner

4th Grade Teacher Bernice A. Ray School

Leveraging Technology to Develop Students' Mathematical Understanding and **Equitable Teaching Practices**

② 10:00 AM - 10:45 AM, Feb 20

♀ Grand 8

Middle Level 6-8 | High School 9-12 | Mathematics

Digital tools and Apps can support access to rich and meaningful mathematics by all students. We will examine several examples in which technology can be used to develop students' mathematical understanding in the secondary classroom and support equitable instruction.

▼ Speakers



Enrique Galindo Associate Professor Indiana University



Selim Yavuz Ph.D. Candidate Indiana University

Shifting Toward Digital Storytelling to Engage and Teach STEM Learners

② 10:00 AM - 10:45 AM, Feb 20

Science Education Elementary K-5 Middle Level 6-8

Our students access information in different ways that we did. Come see examples of ways to use digital storytelling to engage STEM learners though digital storytelling.

♥ Speaker



Tom J. McConnell The Hoosier Science Teacher Advisory Board Ball State University

A-Z STEM: Using the Alphabet as a Framework for Science Learning

② 10:00 AM - 10:45 AM, Feb 20

♀ Veterans 2

Science Educa...

Use Children's Museum tools to teach any STEM topic using the alphabet. This strategy is useful for simple or complex topics, from Astronomy to Zoology.

📢 Speaker



Don Riefler Science Programs Manager The Children's Museum of Indianapolis

Ensuring Access and Equity for All Doesn't Have to be Rocket Science!

② 10:00 AM - 10:45 AM, Feb 20

♀ Veterans 3

Interdisciplinary (i.e. STEM) Middle Level 6-8 High School 9-12

Design a system to model rocket launchers, highlighting support for gender equity, economically disadvantaged youth, English learners, students with disabilities and advanced and gifted learners.

♥ Speaker



Greg Sloan Curriculum Specialist Savvas Learning Company

Do Real Hands-On CRISPR Gene Editing!

② 10:00 AM - 10:45 AM, Feb 20

♥ Veterans 4

Life Science | Middle Level 6-8 | High School 9-12 | General

In this hands-on workshop edit a chromosomal gene, complete with essential experimental controls, using the same cut-and-repair technology used in medicinal and agricultural applications.

♥ Speaker



Tamica Stubbs

Curriculum and Training Specialist Bio-Rad Laboratories

Unpacking Word Problems: Preparing Students to Understand and Explain **Content**

② 10:00 AM - 10:45 AM, Feb 20

♥ Veterans 5

Interdisciplinary (i.e. STEM)

Elementary K-5 Middle Level 6-8

High School 9-12

The main focus will be research-based methods and strategies that improve student verbal and written communication using academic vocabulary. Help students break down word problems and performance tasks to meet the IDOE Performance Level Descriptors.

▼ Speaker



Sydney Peacock

Teacher

Metropolitan District of Washington Township

11:00 AM

Lunch A

② 11:00 AM - 12:00 PM, Feb 20

♀ Grand Ballrooms 1-7

Choose either lunch A or B and be sure to take time to visit the exhibit hall! Lunch is from 11:00-1:00 daily.

We're Expecting: Following Pregnancy as an Anatomy & Physiology Phenomenon

② 11:00 AM - 11:45 AM, Feb 20

♀ Veterans 2



Biology Life Science High School 9-12

For my Anatomy & Physiology class the order of units that I follow directly tie to the system development of a fetus. I introduce a class pregnancy at the beginning of the year and follow the order of systems as they would actually be developed during human gestation.

▼ Speakers



Caitlyn Garber

Teacher

Frankton Jr/Sr. High School



Reena Markstahler

Biology & Anatomy/Physiology Southwood High School

POSTER SESSION: Teaching STEM to Upper Elementary and Middle School **Students Using STEM Comic Books**

② 11:00 AM - 11:45 AM, Feb 20

♀ Exhibit Hall

Interdisciplinary (i.e. STEM) Elementary K-5 Middle Level 6-8 High School 9-12

This presentation will feature the use of STEM comic storytelling in teaching Elementary/Middle Schoolers about the interdisciplinary nature of STEM and the concept of innovation in STEM.

♥ Speaker



Taiwo Ogundapo Doctoral Student Indiana University

POSTER SESSION: Indiana Geo-Photo Library

② 11:00 AM - 11:45 AM, Feb 20

♀ Exhibit Hall

Earth/Space Science

Middle Level 6-8

High School 9-12

Targeted for secondary and undergraduate level students, the Indiana Geo Photo Library consists of high quality images, descriptions, and lesson plans that debuts Indiana's geology.

▼ Speaker



Audrey Holmes

University Of Indianapolis

Chemical Reactions: Recovering Copper from Waste Solutions

② 11:00 AM - 11:45 AM, Feb 20

Chemistry High School 9-12

Come explore this interactive session that examines the real-life issue of circuit board waste. Students investigate the use of reactions with three metals for reducing copper waste and reclaiming copper from a used copper etching solution.

📢 Speaker



Billee Procknow

Marketing and Events Manager Lab-Aids

Nourish the Future: Tomorrow's science is looking for leaders

② 11:00 AM - 11:45 AM, Feb 20

♥ Indianapolis B

Interdisciplinary (i.e. STEM) High School 9-12

Introduce students to high-tech STEM careers through the lens of agriculture! Learn about teacher leadership opportunities and explore free resources from nourishthefuture.org that connect your curriculum to a real-world context.

▼ Speakers



Heather Bryan

Nourish the Future - Education Projects



Kim Terry

teacher, South Vermillion High School Indiana Association of Biology Teachers

Computer Science and Science ILEARN assessment updates

② 11:00 AM - 11:45 AM, Feb 20

♀ Indianapolis C

Unpacking the Science Behind LFA Tests that Identify Hormones, Drugs & Pathogens!!

② 11:00 AM - 11:45 AM, Feb 20

Life Science | Middle Level 6-8 | High School 9-12 | General

Come and learn the science behind lateral flow assays or test sticks. Participants will learn how immunological agents can be used to assess a diverse range of agents of interest.

▼ Speaker



Tamica Stubbs

Curriculum and Training Specialist Bio-Rad Laboratories

12:00 PM

Lunch B

② 12:00 PM - 1:00 PM, Feb 20

♀ Grand Ballrooms 1-7

Choose either lunch A or B and be sure to take time to visit the exhibit hall! Lunch is from 11:00-1:00 daily.

1:00 PM

Turn On Learning With Non-Curricular Tasks

② 1:00 PM - 1:45 PM, Feb 20

Elementary K-5 Middle Level 6-8 High School 9-12 General Teacher Educators

The importance of non-curricular tasks cannot be overstated. They ignite the curiosity and problem solving centers of our brain and prepare us for learning. Without them, it's like trying to pour water from a bucket into a straw. Some water's going to get in, but what have you wasted in the meantime?!

♥ Speaker



Jeff Harker

Professional Learning Specialist Keep Indiana Learning

Exploring Mathematics Teachers' Attribution Beliefs for Students' Mathematical Success and Struggle

② 1:00 PM - 1:45 PM, Feb 20

∇ Kennedy/Reagan

Elementary K-5 | Middle Level 6-8 | Mathematics | Teacher Educators

Teachers' attribution beliefs influence the judgments they make about their students and the opportunities they provide for engaging them in mathematical tasks. In this study, we explored in-service and preservice elementary and middle school teachers' stated beliefs about mathematical success.

▼ Speaker



Selim Yavuz

Ph.D. Candidate Indiana University

Computer Science in K-2 English Language Arts

② 1:00 PM - 1:45 PM, Feb 20

Interdisciplinary (i.e. STEM)

Elementary K-5 Middle Level 6-8

Pre-Elementary Pre-K-2nd

Learn to integrate Computer Science standards across the curriculum to cultivate science/STEM literate students in K-2 English Language Arts.

▼ Speakers



Kerry Sensenbrenner

Computer Science Professional Development Specialist Nextech



Jenna Garcia

Other Nextech

Using a Study Cycle to Teach Science Content with Metacognition Reading **Strategies**

② 1:00 PM - 1:45 PM, Feb 20

♀ Indianapolis B

Life Science Middle Level 6-8

Session participants will be using children's books to learn the steps of a study cycle that will enhance student motivation to read science textbooks.

▼ Speaker



Mary Gobbett

Biology Instructor/Laboratory Coordinator University of Indianapolis

ChatGPT (In)Accuracy in Physics Education

② 1:00 PM - 1:45 PM, Feb 20

♥ Indianapolis C

Physical Science/Physics General

This session will showcase responses by ChatGPT to questions relevant to student learning in physics.

▼ Speakers



Joel Bryan

Teacher Ball State University



Zach Goree

Getting Involved in HASTI

② 1:00 PM - 1:45 PM, Feb 20

♥ Indianapolis D

Science Education

Elementary K-5 Middle Level 6-8

Want to get involved with HASTI, but don't know how or what the commitment would be? Come and find out!

▼ Speakers



Stacy Hootman

Dean of the Schools of Health Sciences and Arts, Sciences, and Education Ivy Tech Community College



Shannon Hudson

Teacher Crawfordsville Middle School



Kristen Poindexter

Teacher Allisonville Elementary School

Equitable Adjustments to Indiana Department of Education Accountability Scores: Which Schools Truly Scored an A?

② 1:00 PM - 1:45 PM, Feb 20

♀ Indianapolis E

Elementary K-5 Middle Level 6-8 High School 9-12 General Mathematics

This presentation describes a process for effectively and equitably evaluating schools' assessment data. IDOE's current A-F Grading Scale does not account for the many variations across student populations, such as free and reduced lunch, special education, and ELL services.

♥ Speakers



Jenny Cox Professor **Butler University**



Chloe Enk Student **Butler University**

Growing Student Partnerships Through Math Games

② 1:00 PM - 2:45 PM, Feb 20

♀ Grand 8

Elementary K-5 General Teacher Educators EXTENDED WORKSHOP

Supporting mathematicians means supporting their learning AND developing their ability to work and grow with others. Join this session to learn ways to teach SEL through math games. As we strengthen student partnership and collaboration skills, we strengthen their learning.

📢 Speaker



Jessica Miller Professional Learning Specialist Keep Indiana Learning

Climate, Water, Wildlife & Resilience

② 1:00 PM - 2:45 PM, Feb 20

High School 9-12 Interdisciplinary (i.e. STEM) EXTENDED WORKSHOP

Engage in STEM activities designed unpack the complex topic of climate and its impact on Indiana ecosystems

▼ Speaker



Kathy Madren **Education Outreach Specialist** DNR Division of Fish & Wildlife

No More Mistake Paralysis: Creating the Psychological Safety to Learn from **Mistakes**

① 1:00 PM - 2:45 PM, Feb 20

Elementary K-5 Interdisciplinary (i.e. STEM) Pre-Elementary Pre-K-2nd EXTENDED WORKSHOP

Discover strategies for fostering a psychologically safe learning environment that encourages embracing and learning from mistakes. Learn to transform setbacks into valuable learning opportunities, empowering students to take risks. Walk away with practical strategies to create a culture that values mistakes as a vital part of the learning journey.

♥ Speaker



Katrice Quitter Head of Partnerships thinkLaw

Chemistry of Air Bags

② 1:00 PM - 1:45 PM, Feb 20

♀ Veterans 3

Chemistry College

Elementary K-5

The chemistry of automotive air bags will be explored and students will have to make the calculations necessary to fill their own "air bag". Using stoichiometry and inquiry, students will determine how much gas is needed to fill their air bag.

▼ Speaker



Kelly Kuchenbrod Science Teacher

Harrison High School

Beyond Key Words in Story Problems

② 1:00 PM - 1:45 PM, Feb 20

♀ Veterans 5

Elementary K-5 Middle Level 6-8 Mathematics Teacher Educators

How can we teach through the lens of reading comprehension to support understanding and meaning of math in context? Approaching problem solving with reasoning and comprehension in mind.

♥ Speaker



Leah Stayer

Professor Indiana University

Getting Ready for the Spectacular Total Solar Eclipse - April 8, 2024

② 1:00 PM - 1:45 PM, Feb 20

♀ Veterans 4

Interdisciplinary (i.e. STEM) Earth/Space Science

Middle Level 6-8

General

On April 8, 2024, much of Indiana will be "prime real estate" to the see the last total solar eclipse visible in in the continental U.S. until 2045. While the total eclipse will only be visible in a narrow band about 100 miles across, everyone in North America will see a partial solar eclipse, where a big "bite" will be taken out of the Sun. The session will cover the essentials for making the most this rare and beautiful event:

- What causes eclipses and what they can teach us,
- Explain where, when, and how to safely view the two eclipses, and
- Share hands-on activities for classrooms and informal science settings.

♥ Speaker



Dennis Schatz

2:00 PM

We Need More Teachers! Repairing the Reputation of the Teaching Profession **Using Data**

2:00 PM - 2:45 PM, Feb 20

Teacher Educa...

This session prepares teacher educators to debunk myths about the teaching profession using data. Leave equipped to change the narrative about the teaching profession with usable resources, and explore tools that can support your recruitment efforts.

▼ Speaker



Jean Lee Professor University of Indianapolis

Promoting Conversations in a Student-Centered Classroom

2:00 PM - 2:45 PM, Feb 20

∇ Kennedy/Reagan

Middle Level 6-8 | High School 9-12 | Teacher Educators

Engage as a learner in a space that de-centers the teacher as the sole holder of knowledge. This session will focus on allowing all learners to access student conversations as a tool for growth, inquiry, and achievement.

♥ Speaker



Kaitlin Fields

District MS Instructional Coach Washington Township Schools

Leveraging assessment with BIOZONE

② 2:00 PM - 2:45 PM, Feb 20

Science Education

High School 9-12

BIOZONE worktexts contain a rich variety of activity types, providing numerous ways for students to demonstrate understanding through flexible formative and summative assessment tasks.

▼ Speaker



Pam Temons

Marketing Manager North America **BIOZONE** Corporation

A formative assignment on interpretation of scientific journal articles

② 2:00 PM - 2:45 PM, Feb 20

Ecology/Environmental Science High School 9-12

I developed a formative assignment designed to help students learn how to read and interpret scientific journal articles.

♥ Speaker



Donald Winslow

Assistant Teaching Professor of Life Science Indiana Academy for Science, Mathematics, and Humanities

Using Edpuzzle in Your Science Classroom: Examples from Physics

② 2:00 PM - 2:45 PM, Feb 20

♀ Indianapolis C

Interdisciplinary (i.e. STEM) General

A demonstration of how the free program Edpuzzle provides instructors with a way to embed assessment into video clips.

📢 Speaker



Joel Bryan

Teacher Ball State University

Assessing and Planning for Integrated STEM Within Schools and Districts

Interdisciplinary (i.e. STEM)

Join IDOE to participate in the process of evaluating current alignment to Indiana's Integrated STEM Standards in your school or district using the Integrated Planning Tool and Integrated STEM Frameworks. This is an initial step towards increasing STEM integration across all K-12 disciplines.

Kate Blaske, Secondary Science Specialist, Indiana Department of Education

Heidi Shultz, Secondary Math Specialist, Indiana Department of Education

♥ Speakers



Heidi Shultz

Secondary Mathematics Specialist Indiana Department of Education



Kate Blaske

My Kids Don't Know Their facts, and They Have No Number Sense

② 2:00 PM - 2:45 PM, Feb 20

? Indianapolis E

Elementary K-5 General High School 9-12 Middle Level 6-8 Mathematics Teacher Educators

Looking to change the narrative from what students cannot do, to using performance-based assets to move student's thinking forward in mathematical reasoning and developing of basic operations, facts, and procedural fluency across the k-8 math continuum.

♥ Speaker



Cory Howard Professor Trine University

A Dog's Life: Using Data To Explore Genomics With HHMI BioInteractive

② 2:00 PM - 2:45 PM, Feb 20

♀ Veterans 3

Biology Life Science High School 9-12

How can genetic studies in dogs inform human medicine? Using free HHMI BioInteractive resources, we'll explore how scientists identify genes that affect human traits.

♥ Speaker



Sherry Annee

Biotechnology Teacher Brebeuf Jesuit Preparatory School

Get Started with Building Thinking Classrooms: How to go from Non-Curricular to Curricular

② 2:00 PM - 2:45 PM, Feb 20

♀ Veterans 5

Elementary K-5 Middle Level 6-8

Our presentation will cover highlights from BTC tool kit one and two. With one year under our belt trying BTC strategies, we have tips, tricks, and resources for defronting classrooms, creating random groups, creating tasks, etc. We want teachers of middle level learners walk away from our presentation excited to begin their year with all things BTC.

♥ Speakers



Amanda Ray

5th GradeTeacher & PLC Lead Franklin Community Schools



Mandy Ramey

Instructional Coach Franklin Community Schools