BUREAU OF EDUCATION & RESEARCH

## A Unique Two-Day Live Online Conference

# 2026
# *Conference for SCIENCE Teachers:*
## Strategies, Tools and Investigations That Work (Grades 6-12)

### January 14 and 15

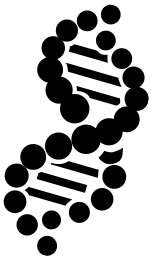
*Start Time:* **9 AM Eastern**
(8 AM Central, 7 AM Mountain, 6 AM Pacific)

CEUs and Graduate Credits Available
See page 7 for details

## Choose from 21 Strategy-Packed Conference Sessions

**Outstanding Trainers • Science Teacher Resources • Hundreds of Practical Strategies**

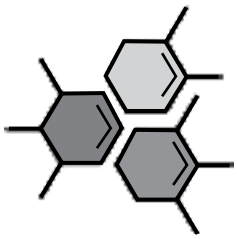
# Practical Strategies to Take Back to Your Classroom!



Life Science

Engineering & Technology

Earth & Space Sciences



Physical Sciences

## Meet Your Team of Expert Instructors

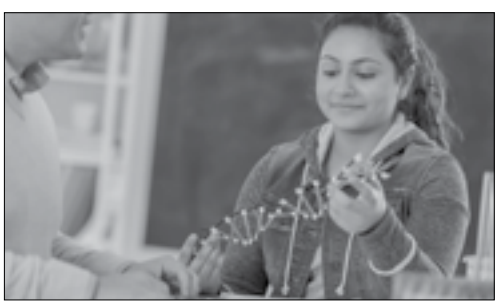
**DR. MARQUITA BLADES** is an experienced and award-winning secondary science teacher, international speaker, author, and science consultant. Marquita's diverse experiences have put her on the front line of the implementation and integration of *Next Generation Science Standards*. She has managed national STEM programs for secondary level students and has served as a curriculum and assessment developer, and professional learning facilitator for numerous school districts.

**DR. VINCE MANCUSO** is a highly experienced science teacher, national presenter and author with a passion for phenomena-driven inquiry and the *NGSS*. He is a frequent presenter at science conferences where his sessions draw standing-room only crowds. Vince enjoys sharing his enthusiasm for using phenomena to get students excited and curious about science. His ideas are powerful and practical and all have been student-proven in his own classroom.

**MARJORIE (MARGE) PORTER** is an exemplary science teacher and education consultant, committed to instructional excellence and the creative use of technology to enhance and support student learning. Marjorie has presented outstanding professional development seminars, both regionally and nationally, on a variety of science topics. She is a highly experienced science teacher, national presenter, and author with a passion for phenomena-driven inquiry in grades 6-12.

### Who Should Attend

Educators who Teach Science in Grades 6-12: Classroom Teachers, Department Heads, Science Specialists, and Administrators





*What participants are saying …*

# Day One

## Keynote • 9:00 – 9:30 am

### "Teaching Science to the TikTok Generation"
*– Marquita Blades*

Today's students are busy decoding pop culture and getting science lessons from influencers before they ever walk into their classroom. So, the question isn't whether they're learning science — it's where, how, and from whom. Dr. Marquita Blades kicks off two days of science learning with what it means to teach science in a world where trends spread faster than facts. Reclaim science as the lens students need to make sense of their world — and give them the tools to think critically, challenge misinformation and see themselves in the story of science.

### Team Discount

**ONE DAY**

One Person: $295

**BOTH DAYS**

One Person: $545

**Team of 3+: $525 per person when enrolled at the same time**

## MORNING SESSIONS • 9:40 am – 12:10 pm

Choose ONE Full Morning Session OR TWO 70-Minute Sessions
*One mid-morning break*

### Full Morning Session • 9:40 am – 12:10 pm

**A-1: Meet Them Where They Are: Practical AI Tools to Help You Differentiate Your Science Instruction** – *Marquita Blades*

How can you more easily ensure that you are maintaining the appropriate level of rigor while leaving no student behind? In this session we will explore using the Escape Room model and Google Forms and highly practical AI tools to create 3-D lessons that are inclusive for students at varying levels of achievement.

### First 70–Minute Morning Sessions
### 9:40 – 10:50 am

**CHOOSE ONE: A-2 or A-3**

**A-2: Powerful Ways to Make Science More Meaningful for Your Students** – *Vince Mancuso*

Science education research shows that students learn best when their classroom experiences are personally meaningful. Explore how phenomena can be delivered in ways that profoundly affect students at personal levels. Discover how to construct experiences that can be more meaningful to students within the structure of your existing learning environment and lessons.

**A-3: Selecting Phenomena That are Relevant, Engaging and Authentic** – *Marge Porter*

In this lively session we will dispel the myth that anchor phenomena are just "hooks" that "wow" your students. Beginning with a variety of solid examples, we'll explore what phenomena really are, how to select appropriate ones for unit storylines, and strategies for how they can best be utilized to engage learners in the process of science knowledge construction.

### Second 70–Minute Morning Sessions
### 11:00 am – 12:10 pm

**CHOOSE ONE: A-4 or A-5**

**A-4: Using Discourse to Collaboratively Construct Meaning of Phenomena** – *Vince Mancuso*

One of educators' fundamental roles in the science classroom is to frame and navigate the learning environment towards the co-construction of knowledge. Discover powerful strategies and techniques that foster more rewarding discourse, leading to a deeper understanding of natural phenomena.

**A-5: Developing Prompts for Engaging Learners in the Science and Engineering Practices and Crosscutting Concepts** – *Marge Porter*

Come to this session with a unit (or unit standards) in hand! You'll learn and practice innovative ways to tweak classroom-ready prompts for both the crosscutting concepts and the science and engineering practices. There will also be an opportunity to zero in on a favorite unit and select prompts that can be utilized as formative assessments. Come prepared to collaborate and share!

### Lunch break • 12:10 – 1:10 pm

## Who is BER?

The Bureau of Education & Research is North America's leading presenter of training for professional educators. Our goal is to provide high-quality PD programs, based on sound research, with an emphasis on practical strategies and techniques that can be immediately implemented.

*"I highly recommend BER. I collected some of the latest and greatest sets of resources for science education today."*

– Ella Maria, Science Educator

# Day One

## AFTERNOON SESSIONS • 1:10 – 3:40 pm

Choose ONE Full Afternoon Session OR TWO 70-Minute Sessions
*One mid-afternoon break*

**Full Afternoon Session • 1:10 – 3:40 pm**

**B-1: Visual Literacy & Journaling as Mechanisms for Improved Science Engagement** – *Marge Porter*

Learn multiple evidence-based strategies for engaging learners in visual literacy and science journaling activities. Plan to put your student hat on to actively process, interpret, understand, and appreciate scientific information presented through pictures and other visual representations.

**First 70–Minute Afternoon Sessions 1:10 – 2:20 pm**

**CHOOSE ONE: B-2 or B-3**

**B-2: Using Academic Discourse to Drive Your Science Lessons** – *Marquita Blades*

Get your students sounding like the scientists and engineers that they are by learning practical methods for embedding opportunities for academic discourse into your existing science lessons. Leave with ideas you can the next day!

**B-3: Harness the Power of Discrepant Event Phenomena in Your Science Classroom** – *Vince Mancuso*

A discrepant event phenomenon can be one of the most powerful and valuable strategies in a science educator's toolbox. The learning potentials of a discrepant event demonstration lie in their specific attributes, format and delivery. Discover the most rewarding features of discrepant events and learn to anchor them to lessons in ways that can meaningfully engage students and significantly influence learning outcomes.

**Second 70–Minute Afternoon Sessions 2:30 – 3:40 pm**

**CHOOSE ONE: B-4 or B-5**

**B-4: Let AI Help You Incorporate Crosscutting Concepts Into Your Science Stations** – *Marquita Blades*

Including multiple, much less all, crosscutting concepts in one lesson or lab can be a challenge. In this session, learn ways to use stations more intentionally to not only include crosscutting concepts, but also to support authentic mastery of the scientific inquiry process.

**B-5: Delivering More Powerful Learning Experiences in Life Sciences/Biology** – *Vince Mancuso*

Among the most challenging disciplines to identify phenomena and develop lessons are the life sciences. In this interactive session, you will discover new and innovative lessons, phenomena and resources that align directly to the *NGSS* standards for life science, biology and anatomy.

## Can't Attend?

### Online Professional Development Options: Related Online Courses

A related On Demand Video-Based Online Learning course, *Help Your Students Master the Next Generation Science Standards: Practical Strategies and the Best, New Tools,* for Grades 6-12, is available for immediate registration. To enroll, visit www.ber.org/online

# Day Two

## MORNING SESSIONS • 9:00 – 11:40 am

Choose ONE Full Morning Session OR TWO 75-Minute Sessions
*One mid-morning break*

**Full Morning Session • 9:00 – 11:40 am**

**C-1: Using Phenomena to Launch and Drive a More Powerful Science Lesson**
*– Vince Mancuso*

Among the most difficult challenges facing science educators is developing 3-dimensional curriculum. In this interactive session, you will discover how your existing or required science curriculum can be reshaped into more impactful science lessons. Learn minor modifications you can make in your current science lessons to easily transform them into more powerful 3-dimensional learning experiences!

**First 75–Minute Morning Sessions**
**9:00 – 10:15 am**

**CHOOSE ONE: C-2 or C-3**

**C-2: Bump It UP With AI-Powered Resources** *– Marquita Blades*

Learn how to incorporate both Cross Cutting Concepts and Science and Engineering Practices in practical ways, using the lessons and materials that you already have. Bring a copy of your favorite lab or activity that could use a little boost and we will Bump it UP!

**C-3: Powerful Engagement Strategies for Your Science Lessons**
*– Marge Porter*

Learn proven ways to combine "classic" evidence-based learning tools with motivating and useful apps, online applications and interesting data sources. Help your students dive deeper and strengthen their understanding of difficult science concepts using strategies that are guaranteed to reinforce the science practices and crosscutting concepts.

**Second 75–Minute Morning Sessions**
**10:25 – 11:40 am**

**CHOOSE ONE: C-4 or C-5**

**C-4: The 3rd Dimension: Reinforcing Science and Engineering Practices**
*– Marquita Blades*

Thinking like a scientist or engineer requires practice. In this session, you'll receive examples of strategies that will help our students develop the skills necessary to master science and engineering practices and apply them in any situation.

**C-5: Using Case Studies to Facilitate Problem-Based Learning**
*– Marge Porter*

Learn how to incorporate problem-based learning (PrBL) by exploring case studies in science. Become familiar with the ins-and-outs of this student-centered approach in which the "problem" drives student motivation and learning. Support resources included!

**Lunch Break • 11:40 am – 12:40 pm**

## On-Site Training

Conferences like this one along with many other topics can be brought to your school or district. Please view all of our On-Site PD options at www.ber.org/onsite or call 877-857-8964 to speak with an On-Site Training PD Consultant.

## Comprehensive Digital Resource Handbook

You will receive an extensive digital resource handbook, specifically designed for this conference. Included in the handbook are resource materials for ALL conference sessions, even those you don't attend. These materials include:

- Practical ideas for helping your students meet rigorous science content and practice standards
- Innovative strategies for integrating the science and engineering practices and crosscutting concepts into your science instruction
- Proven step-by-step techniques for planning engaging instructional sequences aligned to the *NGSS*
- Outstanding ideas for incorporating engineering into your science instruction

*"This definitely helped me become a better science teacher. Can't wait to take this back to my students!"*

– Kaylynn Rivero, Science Teacher

*"This was a great conference to attend to get powerful strategies and tools to engage today's students."*

– Alexander Dixon, Science Department Chair

## ABOUT BER LIVE ONLINE CONFERENCES

**Outstanding Instructors**
All programs are led by outstanding, top-rated BER national trainers.

**Extensive Digital Resource Handbook**
You'll receive an extensive digital Resource Handbook full of practical strategies and resources.

**Highly Interactive**
You'll be able to ask questions, consult with the instructors, and share ideas with other participants.

**Program Guarantee**
As we have for 48 years, we guarantee the high quality of our programs. If you are not satisfied, we'll give you a 100% refund.

# Day Two

## AFTERNOON SESSIONS • 12:40 – 3:20 pm

Choose TWO 75-Minute Afternoon Sessions • *One mid-afternoon break*

### First 75–Minute Afternoon Sessions 12:40 – 1:55 pm

**CHOOSE ONE: D-1, D-2 or D-3**

**D-1: AI Isn't Cheating— It's a Cheat Code: Science Teaching in the Age of Automation** – *Marquita Blades*

Students are already using AI. So the question is: are we using it to make science teaching more effective or just more efficient? Actively create usable materials that require students to think with AI, not copy from it. You'll leave with a new perspective, ready-to-use prompts and resources to make AI your planning partner— not your competition.

**D-2: Utilize Effective Student Assessment Strategies in the Phenomena-Driven Science Classroom** – *Vince Mancuso*

Assessment techniques should complement the style of learning students experience in the classroom, which can present some unique challenges. This session will provide tools, resources and practical strategies for appropriate summative and formative assessment of student understanding of science and skill development in a 3-dimensional learning environment.

**D-3: Using Explanatory Modeling to Help Your Students "Figure it Out"** – *Marge Porter*

Learn to use phenomenon-driven explanatory modeling as a mechanism to construct science learning. Identify practical ways to more effectively take on the role of facilitator as your students work collaboratively throughout a unit to model and explain how a phenomenon works.

### Second 75–Minute Afternoon Sessions 2:05 – 3:20 pm

**CHOOSE ONE: D-4, D-5 or D-6**

**D-4: AI-Enhanced, 3-Dimensional, Problem-Based Science Instruction** – *Marquita Blades*

Developing strong problem-solving skills can only happen if students have opportunities to practice solving problems. Learn how to enhance 3- dimensional practices by engaging in a sample problem-based lesson simulation. Leave with the resources you can use to duplicate the problem-based simulation model with your own students.

**D-5: Guiding Students to Develop More Rigorous and Rewarding Research Questions** – *Vince Mancuso*

The ability for students to develop their own research question is a critical skill that frames their investigation but is unfamiliar territory for most students. Discover proven strategies and scaffolding techniques that will guide students towards the construction of rigorous and rewarding research questions.

**D-6: Engaging Strategies to Strengthen Argument-Based Science Inquiry in Your Classroom** – *Marge Porter*

Embrace the practices of science with engaging research-based strategies that will strengthen your students' ability to formulate explanations from evidence, connect explanations to scientific knowledge, and communicate and justify explanations.

# Conference for SCIENCE Teachers

## Registration (NGM6W1)

*(Please copy this registration form for additional registrants)*

**JANUARY 14 and 15, 2026** (Start time: 9 AM Eastern)

*Both days:* ☐ January 14 and 15, 2026
*Day One:* ☐ January 14, 2026
*Day Two:* ☐ January 15, 2026

FIRST NAME M.I. LAST NAME

POSITION, SUBJECT TAUGHT GRADE LEVEL

SCHOOL NAME

SCHOOL MAILING ADDRESS

CITY & STATE ZIP CODE

SCHOOL PHONE NUMBER ( ) HOME PHONE NUMBER ( )

***Registration confirmations and login details are sent via e-mail***

E-MAIL ADDRESS (REQUIRED FOR EACH REGISTRANT)

HOME MAILING ADDRESS

CITY & STATE ZIP CODE

**PRIORITY ID CODE: ENGM6W1**

## METHOD OF PAYMENT – Group Discount Available

**Payment is due prior to the program.** No cash, please.
One day only, **$295**; both days, **$545;**
**$525** per person for groups of three or more registering at the same time for both days.

☐ A check (payable to **Bureau of Education & Research**) is attached

☐ A purchase order is attached, P.O. #_____
(Be sure to include priority ID code on the P.O.)

☐ Charge my: ☐ MasterCard ☐ VISA ☐ Discover

Account # _____ Exp. Date: _____ MO/YR

Billing Zip Code: _____ 3 Digit CVV Code: _____ (Found on back of card)

_____
Please print name as it appears on card

## Earn One to Four Graduate Semester Credits

University of Massachusetts Global

Up to four graduate-level professional development credits are available with an additional fee and completion of follow up practicum activities. Details may be found at www.ber.org/credit

## Meet Inservice Requirements / Earn State CEUs

Participants can receive a certificate of participation that may be used to verify continuing education hours. In addition, state CEUs (**including WA STEM clock hours**) are available. For details, visit www.ber.org/ceus

## FIVE EASY WAYS TO REGISTER:

**SCAN QR code or visit:**
**at.ber.org/regNGM**

**PHONE toll-free:**
**1-800-735-3503**
(Weekdays 5:30 am - 5:00 pm Pacific Time)

**FAX this form to:**
**1-425-453-1134**

**MAIL this form to:**
**Bureau of Education & Research**
915 118th Avenue SE • PO Box 96068
Bellevue, WA 98009-9668

**EMAIL this form to:**
**register@ber.org**

## Session Preferences: Session Numbers Required

### DAY 1

❑ **One Full Morning Session: A-1**
***– OR –***
❑ **Two 70-Minute Morning Sessions**
**A-** _____ (A-2 or A-3) ***– and –*** **A-** _____ (A-4 or A-5)

❑ **One Full Afternoon Session: B-1**
***– OR –***
❑ **Two 70-Minute Afternoon Sessions**
**B-** _____ (B-2 or B-3) ***– and –*** **B-** _____ (B-4 or B-5)

### DAY 2

❑ **One Full Morning Session: C-1**
***– OR –***
❑ **Two 75-Minute Morning Sessions**
**C-** _____ (C-2 or C-3) ***– and –*** **C-** _____ (C-4 or C-5)

❑ **Two 75-Minute Afternoon Sessions**
**D-** _____ (D-1, D-2 or D-3)
***– AND –***
**D-** _____ (D-4, D-5 or D-6)

## Registration Fee

The fee for the first or second day registration only is $295 per person. If a person registers for both days, the registration fee is discounted to $525 per person; $545 per person for groups of three or more registering at the same time for both days.
**Registration fees are due prior to the program. No cash please.**

Fee includes conference registration, a certificate of daily attendance and an extensive digital resource handbook with materials for all sessions – even those you don't attend.

**WA residents**: visit www.dor.wa.gov/TaxRateLookup to find your required WA sales tax rate.

## Cancellation/Substitutions

100% of your paid registration fee will be refunded if you can't attend and notify us at least 10 days before the conference. Late cancellations made prior to the conference date will be refunded less a $15 service fee. Substitutions may be made at any time without charge.

## Program Guarantee

We stand behind the high quality of our programs by providing the following unconditional guarantee: If you are not satisfied with this program, we'll give you a 100% refund of your registration fee.

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**www.ber.org**



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## (Grades 6-12)

## Two-Day Live Online Conference

NGM6W1

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