

# Improving Learning Outcomes for All Students in Your **SCIENCE Classroom** (Grades 6-12)



A Unique, One-Day, Live Online Seminar Presented by

**Elizabeth Mirra**

Outstanding Science Educator and National Presenter

**Specifically Designed for Educators Who Teach Science in Grades 6-12:  
Classroom Teachers, Department Heads, Science Specialists,  
and Administrators**

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**Practical strategies** for designing science instruction to help ALL students achieve ...  
**Innovative ideas that work in-class, online and in hybrid learning environments**

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**Classroom-tested, research-based instructional strategies** that work in diverse,  
inclusive science classrooms

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**Highly effective ways to more deeply incorporate the *Next Generation Science  
Standards*** in your science instruction to improve student achievement

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**Proven techniques** for selecting the right phenomena to engage even the most  
reluctant learners in science

## Live Online Seminars

### January 7

**9 AM Central**, 10 AM Eastern,  
8 AM Mountain, 7 AM Pacific

### January 8

**9 AM Pacific**, 12 PM Eastern,  
11 AM Central, 10 AM Mountain

### January 28

**9 AM Eastern**, 8 AM Central,  
7 AM Mountain, 6 AM Pacific

### January 29

**9 AM Mountain**, 11 AM Eastern,  
10 AM Central, 8 AM Pacific

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### CAN'T ATTEND?

Order the recorded version  
and take the seminar online at  
your convenience (see page 6)

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CEUs and Graduate Credit Available  
See page 6 for details

# Ten Key Benefits of Attending

*'Liz is fantastic and incredibly engaging.'*

– TAMARA BARFIELD,  
SCIENCE TEACHER



## Who Should Attend

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

### 1. Dramatically Improve Science Learning Outcomes for ALL Students, In-Class and Online

Discover proven strategies to help diverse students master the NGSS standards whether instruction is online or in-person

### 2. Utilize Timesaving Techniques for Differentiating Science Instruction

Discover time-efficient ways to differentiate science instruction to better meet diverse student needs ... Learn proven ways to provide enrichment and remediation in your science instruction in-class and online

### 3. More Effectively Incorporate the Next Generation Science Standards in Your Science Instruction

Learn from an enthusiastic secondary science teacher and national presenter practical ways to more effectively align your science instruction with the NGSS and improve the learning outcomes for *all* of your students

### 4. Engage Students Through Powerful Anchoring Phenomena

Learn how to choose the best phenomena that will engage your students – even reluctant learners

### 5. Receive Take-Home Strategies for Scaffolding Scientific Writing

Learn ready-to-use ways to scaffold scientific writing for English Language Learners and students with writing disabilities

### 6. Incorporate Formative Assessments into Virtual, Hybrid or Traditional Classroom Instruction

Being able to monitor student understanding is essential to ensuring all students achieve the standards ... Uncover practical ways to streamline this process

### 7. Make Your Science Classroom More Three-Dimensional to Increase Student Success

Learn how integrating science and engineering practices, crosscutting concepts and disciplinary core ideas into our daily science lesson plans is the key to meeting students' diverse needs and enabling their success in science

### 8. Create a Rigorous, Student-Centered Science Classroom

Acquire strategies that encourage students to take greater ownership of challenging concepts

### 9. Help Students Make Greater Sense of Phenomena Through the Science and Engineering Practices

The science and engineering practices are a game changer – they put students in positions of being knowers, doers and makers and are a critical component to promoting student equity ... Here's how

### 10. Receive an Extensive Science Digital Resource Handbook

Each participant will receive an extensive digital resource handbook filled with practical strategies, lessons, tips, and much more to improve science learning outcomes whether you're teaching in-person or online

# Outstanding Strategies You Can Use Immediately

## What You Will Learn ...

- **Proven strategies** for helping diverse students in inclusive classrooms master the science standards **whether instruction is being delivered online or in-person**
- **Where to find** engaging anchoring phenomena to drive instruction in your virtual or traditional classroom
- **How to choose the phenomena** that will work best for the students in your classroom
- **What three-dimensional learning driven by a phenomenon can look like** in diverse, inclusive classrooms
- **Highly effective ways** to use the science and engineering practices to maximize students learning
- **Ways to make student thinking visible** and formatively assess students with limited English proficiency or writing disabilities
- **Practical ways** to differentiate instruction so that struggling students are supported and excelling students are challenged
- **Powerful techniques** for teaching students to engage in focused, productive science discourse
- **Proven strategies** for structuring and facilitating science talk and argumentation both online and in-person
- **Classroom-tested supports and scaffolds** to help English language learners and students with learning disabilities succeed with scientific writing.
- **Where to find the best free paper-and-pencil and online assessments** that align with the *NGSS*
- **How to make assessments accessible and equitable** for all learners
- **Proven methods** to significantly increase student motivation in learning science in online or traditional classrooms
- **Practical ways** to use the science and engineering practices to strengthen your instruction and meet student learning needs



*‘Liz is professional, polished and approachable.’*

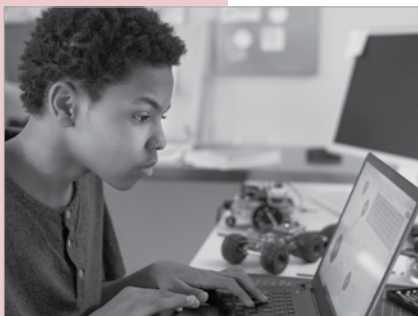
– DIANE GUIDA, HIGH SCHOOL SCIENCE TEACHER

## Practical Ideas and Strategies

Science has been called “the great equalizer.” It helps to create a scientifically literate population, creates career-ready students, and helps attract students to the fields of science and engineering. All students see increases in achievement when engaged in high quality science instruction and non-mainstream and less privileged populations see the greatest impacts from those learning experiences. So how do we create instructional opportunities that maximize these outcomes for all students? In this seminar specifically designed for 6-12 science classroom teachers, learn the research-based classroom-proven strategies that have a positive impact on increasing student engagement and improving student outcomes in our increasingly diverse and inclusive science classrooms. ***You’ll leave with tools and resources that you can take back and put to use immediately, whether you are teaching in an online, hybrid or in-person learning environment.***



# A Message From Seminar Leader, Elizabeth Mirra



## Uniquely Qualified Instructor

**ELIZABETH MIRRA** is a science instructional coach and a middle and high school science educator with more than 20 years of experience. As a science teacher, she had remarkable success boosting students' motivation and achievement in her science classes. She was involved in reviewing and providing feedback on the *Next Generation Science Standards* throughout their development and has worked with numerous school districts providing professional development on best science practices and assistance with aligning curriculum to the new standards. Elizabeth was the 2011 recipient of the prestigious President's Award for Excellence in Science Teaching and is the author of *Improving the Outcomes for All Students in Your Science Classroom (Grades 6-12)*, the extensive digital resource handbook each participant will receive at the seminar.

Dear Colleague:

Each year our science classrooms are becoming more diverse and including students with a variety of backgrounds, learning differences, and prior knowledge of science. I know in my classroom, it's not uncommon to have a high performing student sitting next to a student that is a nonreader. There are also students with limited English proficiency, students with learning disabilities and students that have just transitioned back from an alternative placement in the same classroom. Most educators find it challenging to meet all the diverse needs of these very different students.

Fortunately, there are research-based strategies that I have personally implemented in my science classroom that have turned this seemingly impossible teaching scenario into a successful learning environment for my students. Come spend the day with me so that I can share with you how to increase your students' engagement and motivation in learning science, how to design learning opportunities that help ALL students master the science standards and how to create equitable and accessible assessments of student learning. I'll even help you navigate how to do this whether you are currently teaching in an online, hybrid, or traditional learning environment.

I invite you to join me for this valuable experience that will inspire and motivate you to return to your classroom and immediately implement the resources and cutting-edge instructional techniques I will share at this seminar. To help support this experience, you will be provided with an extensive digital resource handbook that includes the resources shared during the seminar. I will respect your time by only sharing the best resources and strategies to help ALL your students be successful in learning science. ***Whether your science instruction is in-person, online or in a hybrid learning environment, you'll leave with numerous ideas you can use immediately.***

I look forward to meeting you online at the seminar!

Sincerely,

Liz Mirra

P.S. As an experienced secondary educator, I understand the extra effort it takes to be out of the classroom. I promise you that our day together will be worth your time and that **you will leave with dozens of ready-to-use, practical ideas and strategies** you can implement immediately.

*"I will share with you how to increase your students' engagement and motivation in learning science."*

# What Your Colleagues Say About Elizabeth Mirra

*"We were not just given concepts, **we were given the strategies on how to implement many of these concepts.**"*

Patricia Ramsawak, Earth Science High School Teacher

*"I enjoyed the day. Liz is engaging and I'm leaving with **practical, easy-to-implement tools for my classroom.**"*

Dawn Giovanetto, High School Science Teacher

*"I appreciate the practical applications of the information. **I have new ideas for my lesson tomorrow!**"*

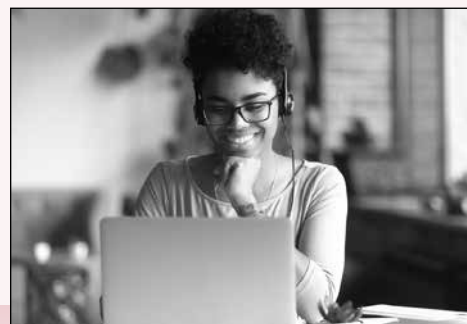
Kathy Hafner, High School Biology Teacher

*"Great! **I now have a better understanding of the Next Generation Science Standards.**"*

Margaret Warrem, High School Science Teacher

*"Liz is very knowledgeable and took time to answer all questions. **She really changed the way I think about science education. I'm so excited to get back into my classroom!**"*

Emily Sandy, High School Biology Teacher



## About BER Live Online Seminars

**With the current health challenges, all BER in-person PD events are currently being presented in a Live Online format:**

### **Outstanding Instructors**

All programs are led by outstanding BER national trainers

### **Extensive Resource Handbooks**

You'll have access to an extensive digital Resource Handbook before, during and after your seminar

### **Highly Interactive**

You'll be able to ask questions in real time and interact with the instructor and other participants

### **Program Guarantee**

As we have for 43 years, we guarantee the high quality of our programs. If you are not satisfied, we'll give you a 100% refund.

# Special Benefits of Attending



*'Liz gave a lot of great, useful information to begin to implement right away.'*

JACKIE MCLAIN,  
MIDDLE SCHOOL TEACHER

## On-Site Training

Most BER seminars can be brought to your school or district in-person or online. See the options at [www.ber.org/onsite](http://www.ber.org/onsite) or call 877-857-8964 to speak to one of our On-Site Training Consultants.

## Extensive Science Instruction Digital Resource Handbook

Each participant will receive an extensive science instruction digital resource handbook giving you access to countless strategies before, during and after the seminar. The handbook includes:

- Step-by-step guides for implementing the strategies with your students in virtual or face-to-face learning environments
- Resources for making science learning accessible for all students in diverse, inclusive learning environments
- The best websites for finding free instructional and assessment materials that align with the *NGSS*
- Sample units for the content and grade level you teach that you could implement with students
- Classroom-tested templates and scaffolds for differentiating science instruction

## Consultation Available

Elizabeth Mirra will be available to answer your specific questions and the unique needs of your own program.

## Meet Inservice Requirements / Earn State CEUs

Participants of both the Live Online Seminar and those completing the Recorded Version online can receive a certificate of participation that may be used to verify five continuing education hours. In addition, state CEUs are available for both versions of the course. For details, visit [www.ber.org/ceus](http://www.ber.org/ceus)

## Earn One to Four Graduate Semester Credits



Up to four graduate level professional development credits are available with an additional fee and completion of follow-up practicum activities. Details for direct enrollment with Brandman University, part of the Chapman University system, will be available at this program.

## Can't Attend?

### Other Professional Development Options:



#### Recorded Version of the Seminar

This course will be video recorded and available to take online at your convenience. You'll have access to the entire course and to the extensive digital resource handbook. Optional CEUs and graduate credit available.

To enroll, see registration form on page 7.



#### Related On-Demand 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](http://www.ber.org/online)

# Improving Learning Outcomes for All Students in Your SCIENCE Classroom (Grades 6-12)

## Registration (COM1W1)

- 1. January 7, 2021** (Start time: 9 AM Central)
- 2. January 8, 2021** (Start time: 9 AM Pacific)
- 3. January 28, 2021** (Start time: 9 AM Eastern)
- 4. January 29, 2021** (Start time: 9 AM Mountain)
- or—
- 5. I'd like to order the recorded version of this seminar**

FIRST NAME \_\_\_\_\_ M.I. \_\_\_\_\_ LAST NAME \_\_\_\_\_

POSITION, SUBJECT TAUGHT \_\_\_\_\_ GRADE LEVEL \_\_\_\_\_

SEMINAR NUMBER: \_\_\_\_\_ (Please see list above)

*List additional registrants on a copy of this form*

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 \_\_\_\_\_

**IMPORTANT: PRIORITY ID CODE: ECOM1W1**

## METHOD OF PAYMENT – Team Discount Available

**The registration fee is \$279 per person,**  
for teams of three or more registering at the same time, the fee is \$259  
per person. **Payment is due prior to the program.** No cash please.


- A check (payable to **Bureau of Education & Research**) is attached
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(Found on back of card)
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## FOUR EASY WAYS TO REGISTER:

 **REGISTER ONLINE at: [www.ber.org](http://www.ber.org)**

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

 **PHONE toll-free: 1-800-735-3503**  
(Weekdays 5:30 am - 4 pm Pacific Time)

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

## Program Hours

- All Live Online seminars start times are described on the cover
- Check-in 15 minutes prior to the seminar
- Live Online seminars are five hours in length plus breaks
- Registrants will receive login information by email four days before their Live Online seminar

## Fee

The registration fee is \$279 per person, \$259 per person for groups of three or more registering at the same time. Call us at 1-800-735-3503 for groups of ten or more. **Payment is due prior to the program.** Fee includes seminar registration, a certificate of participation and an extensive digital resource handbook. The fee is the same for Live Online Seminars or Recorded Seminars.

## 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 seminar. Late cancellations made prior to the event 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.

## Further Questions

Call the Bureau of Education & Research (800) 735-3503 or visit us online at **[www.ber.org](http://www.ber.org)**. The Bureau is North America's leading presenter of PD training for professional educators. Programs are based on sound research, are highly practical in content and consistently receive excellent evaluations.



COM1W1

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## Improving Learning Outcomes for All Students in Your SCIENCE Classroom (Grades 6-12)



An outstanding one-day Live Online Seminar

Includes an extensive Resource Handbook

Can't Attend? A Recorded Version is available  
 to use online at your convenience

## Strengthen Student Learning in SCIENCE (Grades 6-12)

**Practical PD, No Travel**

COM1W1

## Improving Learning Outcomes for All Students in Your SCIENCE Classroom (Grades 6-12)



Bureau of Education & Research

Live Online Seminar  
 or Recorded Version



A Unique One-Day Live Online Seminar  
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Presented by

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**Practical strategies** for designing science instruction to help ALL students achieve ... **Innovative ideas that work in-class, online and in hybrid learning environments**

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