

**Increasing Student Mastery of the  
*NEXT GENERATION SCIENCE STANDARDS*  
Through Practical Implementation of Crosscutting Concepts  
and Science & Engineering Practices  
(Grade 6-12)**



A *NEW* Unique One-Day Seminar Presented by

**Dr. Marquita Blades**

Award-Winning Science Teacher, Author and International Presenter

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

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Discover powerful ways to **more easily and effectively incorporate the  
*Next Generation Science Standards*** into your existing science program

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**Classroom-tested strategies, lessons and techniques** to promote student mastery  
across grade levels and disciplinary core ideas

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**Maximize 3-dimensional science learning** with practical resources, lessons  
and strategies for making best use of crosscutting concepts and science &  
engineering practices in your existing lessons

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**Proven techniques and strategies** to strengthen student collaboration,  
critical thinking, motivation, engagement, and mastery of the *NGSS*

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**California**

**Anaheim – January 31**

**Pasadena (Arcadia) – January 30**

**Illinois**

**Champaign – January 28**

**Chicago North – January 27**  
(Elk Grove Village)

**Chicago South (Alsip) – January 29**

**Kansas**

**Wichita – January 16**

**Missouri**

**Kansas City – January 15**  
(Independence)

**St. Louis (Clayton) – January 13**

**Springfield – January 14**

**Oklahoma**

**Oklahoma City – January 17**

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CEUs and Graduate Credits Available  
See page 6 for details

# Ten Key Benefits of Attending

'If I am able to use even one tenth of what was shared today I know it will help my students achieve more.'

- PETER TREASURE,  
SCIENCE TEACHER



## Who Should Attend

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

- 1. Unleash 3-Dimensional Learning and Increase Mastery of the NGSS**  
Learn from an award-winning secondary science teacher and national presenter about essential ways to leverage crosscutting concepts and science & engineering practices ... Increase student mastery of *NGSS* and disciplinary core ideas
- 2. Engage Your Students in Activities That Strengthen Collaboration**  
Learn outstanding ways to maximize student mastery of *NGSS* by promoting sense-making and collaboration
- 3. Increase the Use of Academic Discourse with Disciplinary Core Ideas**  
Help students in your 3-dimensional classroom develop the key vocabulary required to discuss concepts scientifically ... Discover practical ways to increase the use of academic discourse to strengthen *NGSS* learning
- 4. Use Phenomena to Boost Student Mastery of Core Disciplinary Ideas**  
Discover outstanding ways to expose grades 6-12 students to multiple content areas simultaneously by focusing on real-world phenomena
- 5. Increase Student Engagement in Your 3D Science Classroom**  
Discover classroom-proven strategies that encourage student participation and collaboration ... Proven ways to engage even students who lack motivation or interest in science
- 6. Create a Highly Effective 3-Dimensional Learning Environment**  
Learn practical methods for incorporating all three dimensions of the *Next Generation Science Standards* into your existing instruction and program ... You need not start from scratch – discover ways to tweak what you are already doing
- 7. Boost Scientific Inquiry and Research Practices**  
Learn highly effective ways you can structure and facilitate rich student inquiry using crosscutting concepts and science & engineering practices
- 8. Help Students Develop Strong Problem-Solving Skills**  
Powerful ways you can use the 3-dimensional learning framework to help students demonstrate mastery of the *NGSS* ... Discover strategies that challenge students to analyze, question and communicate at higher levels
- 9. Create a Rigorous, Student-Centered Science Classroom**  
Acquire strategies that encourage students to take greater ownership of challenging concepts ... Discover highly effective ways to enable and empower your students to “drive” their own *NGSS* learning
- 10. Receive an Extensive NGSS Resource Handbook**  
Each participant will receive an extensive resource handbook filled with practical ideas, tips and tools for helping your grades 6-12 science students master *NGSS* skills and concepts

# Outstanding Strategies You Can Use Immediately

## What You Will Learn ...

- **Highly effective ways to promote mastery** of the *NGSS* using the 3-dimensional learning framework
- **Powerful strategies to reinforce the key fundamentals** of scientific inquiry and research with the science & engineering standards and crosscutting concepts
- **Innovative strategies** that can be used in any grades 6-12 science classroom with any disciplinary core ideas
- **Effective ways to strengthen student engagement** and collaboration
- **Practical strategies to personalize learning** using the 3-dimensional learning framework of *NGSS*
- Outstanding methods to use the **claims, evidence, reasoning (CER) framework** to strengthen students' critical thinking and written expression of *NGSS* skills in any lesson
- Highly effective ways to **maximize students' critical-thinking and problem-solving skills**
- Proven and **time-efficient strategies for differentiation and personalized learning**
- Innovative methods to **ensure students master and build upon** disciplinary core ideas
- **Strengthen student understanding** of complex science phenomena using the crosscutting concepts
- Proven methods to **significantly increase student motivation in learning** science
- Practical ways to **leverage the science & engineering practices** to strengthen the impact of your instruction in meeting your individual students' needs
- **Specific methods** to capture and retain students' focus on learning science in ways that significantly boost achievement



*'Fantastic! One of the most useful, exciting seminars I've attended. I am leaving with many ideas I can implement tomorrow!'*

– KEVIN LONG, SCIENCE TEACHER

## Practical Ideas and Strategies

Join award-winning secondary science teacher, **MARQUITA BLADES** for an engaging, interactive day full of valuable, practical, use-tomorrow strategies to help your students master the *Next Generation Science Standards*. This seminar emphasizes highly practical ways to leverage the crosscutting concepts and science & engineering practices to increase student engagement and mastery of disciplinary core ideas in the *NGSS*.

This need not mean starting over, starting from scratch or throwing out what you currently do. Marquita will show you how to make powerful and subtle tweaks to your current practices to create an interactive, successful 3-dimensional *NGSS* science classroom that supports rigorous and relevant investigations, strengthens academic discourse and reinforces the fundamentals of scientific inquiry.

Gain strategies to enhance successful collaborative learning while reinforcing essential inquiry, research and problem-solving skills. Acquire essential strategies to help your students master and apply disciplinary core ideas. **Come and discover the best, most current ways to help students master the *NGSS* by powerfully leveraging crosscutting concepts and science & engineering practices in your 3D science classroom.**



# A Message From Seminar Leader, Dr. Marquita Blades



## Uniquely Qualified Instructor

**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.

Marquita is passionate about helping fellow secondary science teachers practically and powerfully implement the 3-dimensional learning framework of the *Next Generation Science Standards*. She is also the author of *Increasing Student Mastery of the Next Generation Science Standards through Practical Implementation of Crosscutting Concepts and Science & Engineering Standards*, the extensive resource handbook each participant will receive at the seminar.

**Join Marquita for a valuable day filled with practical strategies you can use tomorrow to inspire and excite your students about science and increase their mastery of the NGSS.**

Dear Colleague:

The *Next Generation Science Standards* have introduced sweeping changes to our traditional science instructional practices. A significant change involves incorporating the crosscutting concepts and science & engineering practices as a key focus of our educational strategy and practice. These two dimensions guide the bulk of our work within the 3-dimensional approach of the *NGSS* – no matter what content we teach. But without focused direction and resources, it can be overwhelming.

I look forward to welcoming you for a day that will be filled with a wealth of outstanding, practical, take-right-back-to-your-classroom strategies you can use to significantly increase excitement and achievement among your grades 6-12 science students. This need not mean starting over, starting from scratch or throwing out what you currently do. I will share highly effective ways you can tweak and greatly enhance what you're already doing in your science program to powerfully incorporate the three dimensions of the *NGSS*.

In our day together, I will share a wealth of proven strategies, tips and techniques to help you easily plan high impact 3D instruction for your grades 6-12 science students. I will equip you with dozens of strategies for using *NGSS* to increase mastery of core disciplinary ideas. Best of all, I will show you how to take what you are already doing and apply the 3D learning model in powerful ways, by leveraging crosscutting concepts and science & engineering practices. All the strategies I will share are ones that I and other teachers I've worked with have found to be most successful in increasing rigor, engagement and mastery of *NGSS* with our own students.

I promise that our day will be fun, engaging and full of many great use-tomorrow strategies to support your students' mastery of *NGSS*. I look forward to meeting you at the seminar!

Sincerely,

A handwritten signature in black ink that reads "Dr. Marquita Blades". The signature is written in a cursive, flowing style.

Dr. Marquita Blades

**P.S. This is not just another PD! Come prepared to roll up your sleeves and get busy as we work through these strategies, just as you will be using them with your students!**

*"I will show you how to take what you are already doing and apply the 3D learning model in powerful ways, by leveraging crosscutting concepts and science & engineering practices."*

# What Your Colleagues Say About Dr. Marquita Blades

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*"Amazing! **Cannot wait to implement these strategies.**"*

Erica Bornhoft, Science Teacher

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*"Thank you so much for the **wonderful and inspiring ideas.** Loved the pace of the PD and your passion for/knowledge of teaching science."*

Diana Hagan, Biology Teacher

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*"I learned a lot of techniques that I will use in my classroom. This was a **great seminar!**"*

Carlie Perretta, Science Teacher

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*"I judge all professional development based on whether or not I could potentially apply it the next day in class. Dr. Blades did a **great job reconciling the theory behind NGSS with the realities we face every day in our classrooms.** I can't wait to implement her techniques in my classroom."*

Derek Srygley, Physics/Science Teacher



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*"This seminar was **well worth the time and money.** The resources that come with the seminar are chock full of lessons to incorporate into the classroom, giving ways to differentiate at so many levels."*

Anne Carroll, Chemistry Teacher

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*"I've attended several NGSS workshops and this was the best. It provided things to use in the classroom using lessons and labs that I already do. I'm very excited to use these strategies."*

Megan Lozier, Earth Science Teacher

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*"Thank you for all of the **wonderful strategies.** This was the best workshop I have been to in my entire career. I will be using these in my classroom for years to come."*

Brian Cofresi, Science Teacher

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*"I love that I'm walking away from this seminar with **ideas I can use immediately** in my classroom. I'm excited to implement these strategies"*

Megan Daley, Science Teacher

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*"Dr. Blades is **incredibly knowledgeable and engaging.** She shared so many applicable ideas."*

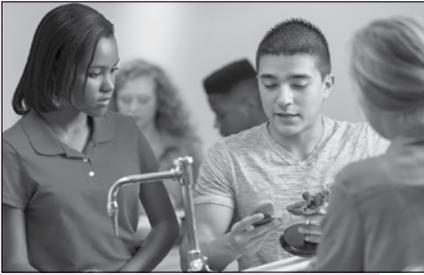
S. Ackerman, Science Teacher

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*"Loved it! You inspired me to take my teaching a step further! I didn't know quite how to bring it up a notch, but now I feel equipped."*

Ramona McGillirray, Science Teacher

# Special Benefits of Attending



## Online Learning

BER offers educators a wide range of online courses that are affordable, fun, fast, and convenient. BER is now offering On Demand Video-Based courses. You may earn optional graduate-level credits for most courses. See the catalog of available courses at [www.ber.org/online](http://www.ber.org/online)

## On-Site Training

Most BER seminars can be brought to your school or district. 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.

## Can't Attend?

### Other Professional Development Options:

#### Related Online Course

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)



## Extensive NGSS Resource Handbook

Each seminar participant will receive an extensive resource handbook specifically designed for this seminar. Included in the handbook are:

- Innovative ideas for adapting common lessons and/or lab investigations for use with each strategy
- Cross-content ideas and strategies that integrate easily and well with NGSS
- Recommended resources for standards-based and personalized learning/differentiation
- Powerful sample lesson outlines to assist you with planning
- Helpful templates you can adapt and use immediately
- Practical tools for assessing student mastery of concepts

## Meet Inservice Requirements / Earn State CEUs

Participants will receive a certificate of participation that may be used to verify continuing education hours.

### CEUs Available:

#### Illinois

- 5 IL PD Clock Hours Available

#### Kansas

- KS Inservice Credit Available with Prior District Approval

#### Missouri

- MO Inservice Credit Available with Prior District Approval
- KS Inservice Credit Available with Prior District Approval in Kansas City
- 5 IL PD Clock Hours Available in St. Louis

#### Oklahoma

- OK PD Credit Available with District Approval

## Meet Inservice Requirements / Earn State CEUs

Participants will receive a certificate of participation that may be used to verify continuing education hours.

## 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.

# Increasing Student Mastery of the *Next Generation Science Standards* through Practical Implementation of Crosscutting Concepts and Science & Engineering Practices (Grades 6-12)

## Registration (CN20W1)

- 1. **Anaheim, CA** – January 31, 2020
- 2. **Champaign, IL** – January 28, 2020
- 3. **Chicago North** (Elk Grove Village), **IL** – January 27, 2020
- 4. **Chicago South** (Alsip), **IL** – January 29, 2020
- 5. **Kansas City** (Independence), **MO** – January 15, 2020
- 6. **Oklahoma City, OK** – January 17, 2020
- 7. **Pasadena** (Arcadia), **CA** – January 30, 2020
- 8. **St. Louis** (Clayton), **MO** – January 13, 2020
- 9. **Springfield, MO** – January 14, 2020
- 10. **Wichita, KS** – January 16, 2020

FIRST NAME	M.I.	LAST NAME
POSITION, SUBJECT TAUGHT		
GRADE LEVEL		
SEMINAR LOCATION 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 are sent via e-mail.  
If you would like a confirmation, please provide your e-mail address.**

E-MAIL ADDRESS	
HOME MAILING ADDRESS	
CITY & STATE	ZIP CODE

**IMPORTANT: PRIORITY ID CODE: ECN20W1**

## 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
- 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                      Signature (required for credit card purchases)

## 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 6 am - 5 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 seminars are scheduled 8:30 a.m. - 3:15 p.m.  
Check-in 8:00 a.m. - 8:30 a.m.

## 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.** No cash please. Fee includes seminar registration, morning coffee and tea, a personalized certificate of participation, and an extensive resource handbook.

## Meeting Sites and Hotel Accommodations

Seminars will be held at the following sites:

- Anaheim: Red Lion, (714) 750-2801
- Champaign: Hilton Garden Inn, (217) 352-9970
- Chicago North: Holiday Inn – Elk Grove Village, (847) 437-6010
- Chicago South: DoubleTree – Alsip, (708) 371-7300
- Kansas City: Stoney Creek Hotel – Independence, (816) 908-9600
- Oklahoma City: Holiday Inn & Suites North, (405) 286-4777
- Pasadena: Embassy Suites – Arcadia, (626) 445-8525
- St. Louis: Clayton Plaza Hotel – Clayton, (314) 726-5400
- Springfield: Holiday Inn & Suites, (417) 865-8600
- Wichita: Aloft Hotel, (316) 744-1100

If needed, please make your own hotel reservations by calling the appropriate hotel listed above.

## 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 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)

**Increasing Student Mastery of the  
Next Generation Science Standards  
through Practical Implementation  
of Crosscutting Concepts and  
Science & Engineering Practices  
(Grades 6-12)**



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**Best Practices to Increase Student Mastery  
of the NGSS**

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**A Unique One-Day Seminar**

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**Coming to a Location Near You**

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**Help Students Master the  
Next Generation Science Standards  
(Grades 6-12)**

CN20W1

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Bureau of Education & Research



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