

# CEU Approved Science and STEAM Professional Staff Development for Early Childhood Educators



Diana Wehrell-Grabowski, PhD  
<http://www.dianawehrellgrabowski.com>  
[drdianascience@bellsouth.net](mailto:drdianascience@bellsouth.net)

# About Diana Wehrell-Grabowski, PhD aka *Dr. Diana*

Diana received her PhD in Science Education from the Florida Institute of Technology in 1994. She also has a Master's degree in Curriculum & Instruction in Science Education. Prior to establishing her consulting business in, 1987 she was a full-time science teacher, and an adjunct professor (Science Methods). She remains active in the classroom by conducting monthly hands-on science lessons in public and private schools.



Diana has provided over 800 professional staff development training workshops and institutes for public and private educational institutions, corporations, and educational organizations throughout the world.

She has been a keynote speaker, featured speaker, and presenter at over 70 conferences throughout the world.



Diana has worked collaboratively with other organizations in writing grants and providing training for major grant awardees.

Diana is an active member of numerous professional organizations including NSTA, ASEE, YALSA, TCEA, ITEEA, & NAEYC.

Diana is known for her effective and innovative teaching style, as well as being able to captivate, motivate, and inspire participants during her presentations. She is passionate about inquiry-based teaching and learning, student-driven classrooms, and transforming teaching and learning for the 21st-century.



# About the Professional Staff Development/Workshops

- Are available year-round and on weekends.
- Are available throughout the USA and the world.
- Are available in-person/onsite or virtually via ZOOM.
- Professional development is custom-designed.
- Workshops are approved for CEU credits by IAECT.
- Are standards-based (regional/national/global).
- Follow the *Developmentally Appropriate Practice* (DAP) position statement of the NAEYC.
- Meet the goals of the *Every Student Succeeds Act* (ESSA).
- Meet the goals of *Race to the Top-Early Learning Challenge Goals* (RTT-ELC).
- Incorporate 21st-century skills.
- Introduce strategies and explorations to cultivate and nurture the young child's natural curiosity and creativity.
- Empower and inspire participants through a learning community, and active meaningful engagement.
- Use simple, readily available, and inexpensive materials.
- Each workshop is accompanied by a detailed manual.
- Provide opportunities for participants to design and create models to bring back to the classroom.
- Provide opportunities for participants to reflect on their learning.
- Provide opportunities for participants to think about how they will incorporate what they learned within their classroom.
- Provide opportunities for discourse and sharing among peers, and Dr. Diana.



# Science and STEM Workshops

The following workshops are available onsite and virtually. Onsite as half-day, full-day, and multiple-day institutes. Virtual/online workshops are conducted in one-three hour blocks according to clients' requests. The suggested length for workshops is full-day @ 6 hours. All of the workshops have been designed for multiple-day sessions, ideal for sustainable and effective professional staff development. Both online and in-person professional staff development includes 1 (30-minute) post-workshop coaching session to provide valuable feedback on lesson planning & implementation.

## ***Teaching Science Through Inquiry-Based Instruction***

Children are natural-born scientists, they are curious about the world around them. As educators, we must learn how to nurture the innate natural curiosity that young children possess. During this workshop, early childhood educators will be introduced to the foundational principles of inquiry-based teaching and learning, and the benefits of inquiry-based learning. Participants will be introduced to effective inquiry-based teaching strategies and the 5-E Inquiry Model. Participants will have the opportunity to undertake multiple hands-on inquiry-based science explorations with their peers. Closing the session with participants revising one of their existing science lessons to be inquiry-based. (6-18 hours)

## ***Teaching Science to the Preschool Child***

During this workshop participants will be introduced to best practices in teaching science in early childhood learning environments, and strategies to incorporate age-appropriate observational, exploratory, and analytical skills necessary to study the nature of science. Participants will be actively engaged in conducting hands-on-minds-on explorations. The following science areas will be covered: Scientific Thinking, 21st-century learning skills, Life Science, Earth and Space Science, and Physical Sciences. Additionally, participants will be introduced to children's literature to incorporate with science lessons. (6-30 hours)

## ***Young Nature Explorers***

During this workshop, participants will learn simple yet effective ways to use the schoolyard, and other outdoor settings to teach young children about the wonders of our natural world. Concepts include nature awareness, environmental stewardship, wildlife habitats, energy, gardening, exploring STEM outdoors, and creating art from natural materials. Participants will spend 2-3 hours outdoors in addition to indoor instruction and exploration. (6-12 hours)



# Science and STEM Workshops

## ***Teaching Science Through Early Childhood Children's Literature***

During this workshop, participants will learn how to bring science to life through popular early childhood literature including multicultural science-themed titles. Endless examples and strategies of how children's literature can be used in early learning environments to introduce scientific concepts will be modeled and experienced during the training. Participants will be actively engaged in conducting hands-on inquiry-based science explorations accompanied by children's literature titles. (6-18 hours)



## ***Connecting Science Across the Disciplines***

During this workshop, participants will be presented with a broad overview of how science can be creatively integrated across the disciplines, and how cross-curricular connections help children develop deeper knowledge and understanding. Participants will conduct numerous hands-on, inquiry-based explorations that integrate science across the disciplines. Participants will gain insight to creatively integrate science concepts and explorations across the disciplines using an interdisciplinary approach. Explorations will connect science with language and literacy, mathematics, physical development, social studies, and the arts. (6-18 hours)



## ***STEM Workshops***

### ***Exploring Best Practices in Science, Technology, Engineering, and Math (STEM) in Early Childhood Learning Environments (Introductory Session)***

During this introductory workshop, participants will be introduced to best practices in STEM and content appropriate for early childhood learning environments. Participants will be immersed in conducting STEM-based explorations that incorporate important and developmentally appropriate STEM content and skills that develop and strengthen 21st-century skills and engineering habits of mind. Participants will become familiar with the Engineering Design Process/Cycle and design thinking as they undertake numerous engineering design challenges using readily and affordable materials throughout the session. Participants will tinker, build structures with everyday materials and recyclables, incorporate STEM content in the block center, integrate children's STEM-based literature, and be introduced to meaningful, age-appropriate low-cost technology. (6-30 hours)



# STEAM Workshops

## ***Multicultural STEAM Explorations***

During this workshop participants will be actively engaged in undertaking numerous hands-on-minds-on, inquiry-based STEAM explorations that promote and bring awareness to multiculturalism in early childhood settings. Additionally, participants will be introduced to a wide array of STEAM-themed books for young children that promote and empower diversity and multiculturalism. (6-12 hours)



## ***Screen-Free Coding for Young Children***

This workshop is ideal for those organizations and schools looking to introduce young children to the foundational principles of coding unplugged, without screen time. During this workshop, participants will be introduced to the importance of cultivating computational thinking in early childhood learning environments. Participants will be introduced to a wide array of affordable screen-free coding gadgets and toys as well as unplugged games to use when introducing young children to coding. Some of the gadgets participants will use during the training include *Botley*, *Code-n-Go Mouse*, *Fisher-Price Code-a-Pillar and Robot*, *Bee-Bot*, *Coding Critters*, and more. Participants will have the opportunity to use all the gadgets as they undertake coding and engineering challenges throughout the training. This workshop makes connections to all STEAM disciplines. (6-12 hours)



## ***Incorporating LEGO, Duplo Bricks, and More to Develop and Strengthen 21st-Century Skills in Young Children***

During this workshop, participants will be introduced to STEAM-based explorations that incorporate LEGO, Duplo, and compatible building bricks to nurture and develop 21st-century skills, and develop engineering habits of mind. Participants will learn how to design and deliver STEAM-based learning experiences that make connections to the real world through playful learning incorporating LEGO, Duplo, and other compatible building bricks. Participants will leave the session inspired and empowered with a new outlook as to how LEGO and Duplo building systems can provide young children with the skills needed to thrive in the 21st-century. Participants will also receive a set of LEGO Challenge Cards (printed by the hiring client). (6 hours)



# STEAM Workshops

## *Using Loose Parts to Promote Science, Technology, Engineering, Art, and Math (STEAM) Learning*

During this training, participants will be introduced to the Theory of Loose Parts. The Theory of Loose Parts was developed by Simon Nicholson in 1971. Loose parts are materials that can be moved, carried, combined, redesigned, lined up, and taken apart, and put back together in multiple ways. The primary premise of loose parts is that materials empower a creative imagination. The more materials and individuals involved, the more ingenuity takes place. Participants will learn how loose parts can strengthen and develop STEAM as well as social-emotional learning skills and content in early childhood learning environments. Through hands-on-minds-on explorations, participants will be actively engaged in this session as they tinker and explore with a wide array of natural, recycled, and everyday materials undertaking STEAM explorations and challenges in a playful exploratory setting. (6-12 hours)



## *STEM for Infants and Toddlers*

During this workshop, participants will be introduced to foundational principles of STEM education and best practices. Participants will be actively engaged in conducting hands-on-minds-on, inquiry-based explorations as they learn how to incorporate age-appropriate STEM explorations for the infant and toddler learning environment. (6 hours)



# Sample Videos of Trainings & Rates

*Want to get a birds-eye view of what Dr. Diana's professional staff development and keynote sessions look like? Click on the following links for a sampling of professional staff development and interactive keynote sessions conducted by Diana.*

## **Using Loose Parts to Promote STEAM**

<https://www.youtube.com/watch?v=Xk9wGZdq040>

## **STEM in Early Childhood Learning Environments**

<https://www.youtube.com/watch?v=kpdilpF-ey4&t=22s>

## **STEM PD for Head Start Teachers**

[https://www.youtube.com/watch?v=hPjQdZZfN\\_E&t=32s](https://www.youtube.com/watch?v=hPjQdZZfN_E&t=32s)

## **Incorporating 21st-Century Skills in Early Childhood Classrooms**

<https://www.youtube.com/watch?v=e-QowmJfDas&t=27s>

## **STEM in Early Learning Environments Keynote**

<https://www.youtube.com/watch?v=mpqDX-lFGuQ&t=11s>

## **Curiosity Keynote**

<https://www.youtube.com/watch?v=7PB8HLsZt6w&t=81s>

## **STEM in Early Childhood Learning Environments**

<https://www.youtube.com/watch?v=U6eKs6KODSE&t=210s>



## **Rates and Contact Information**

### **Florida Rates**

Three-Hour Workshop @ \$800.00 plus travel costs.

Full-Day (up to 6 hour of instruction) @ \$1,300.00 plus travel costs.

### **Rates Outside of Florida**

Full-Day Workshop @ \$1,800.00 - Eastern States

West Coast/ Pacific Regions Full-Day Workshop @ up to \$2,000.00

Additional fees will be charged for travel (auto, air, hotel, rental car, meals, etc.).

**International Fees** - Contact Dr. Diana for a quote.

**Virtual Professional Staff Development** - Contact Dr. Diana for a quote.

Virtual professional staff development sessions are conducted via ZOOM either in meeting or webinar format depending on the number of participants. Sessions are highly interactive!

Virtual sessions can be scheduled in 1-3 hour blocks.



*Have more questions, need a quote, or interested in scheduling training for the 2021-2022 school year? Contact Diana @ <http://www.dianawehrellgrabowski.com> email @ [drdianascience@bellsouth.net](mailto:drdianascience@bellsouth.net)*