Investigation and Inquiry in Math and Science for Young Children
(Infant/Toddler and Pre-K)

The Keefe-Bruyette Symposium will be held on the University of Saint Joseph campus,
1678 Asylum Avenue, West Hartford, Connecticut.
Mathematics Investigations

“The word mathematics makes many adults think of rote procedures for getting correct answers, a holdover from our own school days. But mathematics is essentially the search for sense and meaning, patterns and relationships, order and predictability.”

The Young Child and Mathematics, Juanita V. Copley, Ph.D.

Scientific Inquiry

“If a child is to keep alive his inborn sense of wonder … he needs the companionship of at least one adult who can share it, rediscovering with him the joy, excitement, and mystery of the world we live in.”

Rachel Carson, Naturalist

Welcome

Dear Participants,

The School for Young Children has much to be proud of this year.

• We are honored to be in our 76th year of providing quality preschool experiences for young children.
• We are very excited to have achieved a new, five-year term of NAEC Accreditation.
• We are also very excited to offer Infant/Toddler workshops at our 11th annual Keefe-Bruyette Symposium.

The School for Young Children opened its doors on the University of Saint Joseph campus in the fall of 1936 for preschool-aged children in West Hartford. Sister Mary McDonough was the first director and Sister Mary de Lourdes was the first head teacher. At the time, SYC was known as the “Nursery School” and served as a learning laboratory for teachers, mothers, and all who were interested in working with children as children. In May, 1936, The Hartford Times wrote, “Its purpose will be to afford opportunity to the people in the vicinity of the college to secure for their children of pre-school age the benefits of a socializing education. It will also afford students in the education, psychology, sociology, and home economics departments a laboratory in which to observe and assist in the best procedure in child care.”

For more than seven decades, The School for Young Children has built on this foundation, continuing the remarkable tradition of providing education to young children and allowing teachers and university students to observe best practices for teaching.

For the past 10 years, The School for Young Children has hosted the Keefe-Bruyette Symposium. During that time, the symposium has achieved much success including:

• welcoming nine nationally recognized keynote speakers
• conducting more than 165 hands-on workshops with nearly 200 dedicated workshop presenters, and
• delighting more than 2,100 eager Symposium participants

We take great pride in hosting this valuable learning event and continuing the tradition today.

Thanks to each of you for supporting our deep-rooted tradition to provide opportunities to “assist you in doing your work more effectively.”

Enjoy the day!

Diane Morton, Director
The School for Young Children at the University of Saint Joseph
About the Symposium

The Keefe-Bruyette Symposium promises to be an inspiring day of learning about investigations in mathematics and science inquiry in early childhood. National education experts, as well as experienced classroom teachers, will offer hands-on workshops about math and science teaching for infant/toddler and preschool children.

Workshops are designed with practicing teachers in mind. Our presenters bring a wide range of experience to the workshops. They are individuals who work with children in a classroom setting or conduct research and program development. They come with concrete examples and ideas that can be used in your classroom.

Schedule

8:15-8:45 a.m.  Registration Check In - The Bruyette Athenaeum at the University of Saint Joseph, 1678 Asylum Avenue, West Hartford

9:00-10:00 a.m.  Keynote Address
“Nurturing the Young Child’s Natural Curiosity and Sense of Wonder through Experiencing the Natural World around Them”
Diana Wehrell-Grabowski, Ph.D.
(See page 3)

10:15-11:45 a.m.  Morning Workshops
(See pages 5-9)

12:00-1:00 p.m.  Lunch

1:15-3:15 p.m.  Afternoon Workshops
(See pages 10-14)

3:15-4:00 p.m.  Tour The School for Young Children

How to Register: Please use the registration form on page 17 to sign up for your first, second, and third choice for both the morning and afternoon workshops.

Keynote Address

“Nurturing the Young Child’s Natural Curiosity and Sense of Wonder through Experiencing the Natural World around Them”

Diana Wehrell-Grabowski, Ph.D.
Chief Executive Officer and Principal Owner
Mobile Science Education Consulting Services

We are all born into the world curious, and in a sense, natural scientists. From the time children are born, they seek out information about the world using all of their senses. Unfortunately, the young child’s curiosity about the natural world is often stifled due to lack of experiences with nature. As adults, we are busy with the hustle and bustle of our everyday lives. Often, we do not take time to observe the simple wonders of the natural world. This interactive keynote address will re-awaken participants’ own sense of curiosity and wonder as they take an active role in observing the wonders of nature. Learn how to use the beauty and wonders of the natural world to stimulate the young child’s natural curiosity, which will help to develop a lifelong love of nature and learning.
Keynote Speaker

Diana Wehrell-Grabowski, Ph.D.
Chief Executive Officer and Principal Owner
Mobile Science Education Consulting Services

Diana Wehrell-Grabowski, Ph.D. is the chief executive officer and principal owner of Mobile Science Education Consulting Services, a science educational consulting company. Dr. Wehrell-Grabowski brings more than 30 years of experience as an educator of children and adults. Throughout her career, she has been a classroom teacher and has provided thousands of hands-on science programs to children of all ages. She has provided hundreds of teacher training and family science workshops, and she has taught science education methods courses at the undergraduate and graduate levels. Dr. Wehrell-Grabowski travels throughout the nation and world year-round conducting hands-on-minds-on professional staff development to teachers and administrators at public and private educational institutions. Additionally, she has been a presenter and keynote speaker at more than 70 education-based conferences.

Over the years, Dr. Wehrell-Grabowski has worked collaboratively with clients in writing grants that were awarded, and has been listed as the primary consultant for many grants. She has authored numerous curriculum manuals that are used during the professional staff development trainings she conducts, and has written articles that have appeared in educational publications.

She is an active member of the following professional organizations for educators: National Science Teacher’s Association, Florida Association of Science Teachers, National Association for the Education of Young Children, National Head Start Association, North American Association for Environmental Education, No Child Left Inside Coalition, American Society for Engineering Education, Coalition for Science After School, and the Florida Reading Association.

Dr. Wehrell-Grabowski holds a B.A. and M.Ed. from the University of Guam, and a Ph.D. (1994) in Science Education from Florida Institute of Technology. When not on the road or in the air, she enjoys exploring nature, which includes searching for pill bugs, snails, and earthworms in her backyard.

Morning Workshops

90-Minute Blocks

1. Science Explorations to Stimulate the Young Child’s Curiosity
Diana Wehrell-Grabowski, Ph.D.,
Chief Executive Officer and Principal Owner, Mobile Science Education Consulting Services

It’s all about keeping the curiosity alive. Participants will be introduced to a wide-array of hands-on-minds-on explorations that can be done both in and out of the classroom. Engage the young child with inquiry as well as physical, earth, space and life science concepts. Prepare to look at nature up close with magnifying lenses, dig in the dirt searching for earthworms, and use your senses to explore solids, liquids, and gases. All explorations undertaken during the workshop are easy to implement, low-cost, and more importantly will help to develop a lifelong love of nature and science in the young child.

Recommended audience: All

2. Science Says: Build It!
Stephanie Kadam,
Education Coordinator,
Stepping Stones Museum for Children
Manirah Agans,
Education Manager,
Stepping Stones Museum for Children

Do you need fresh ideas for the block center in your classroom? Release your imagination into the scientific world of building and design! Build towers, ramps, roller coasters, and more during this hands-on workshop. Rediscover what is possible and why building is important for your students’ development.

Recommended audience: Pre-K
3. Playing, Interacting, and Building Relationships: Developing Cognition in Infants and Toddlers

Lori Blake, Associate Professor and Director of Child Study, Goodwin College

Learn how to use math and science concepts with infants and toddlers in an effort to foster brain development and deepen their knowledge of the world around them. Discuss and explore how nurturing interactions can foster scientific thinking amongst our youngest children on a daily basis.

Recommended audience: Infant/Toddler


Cynthia DeJesus, Teacher, Child and Family Development Resource Center, Eastern Connecticut State University
Amy Tyler, Teacher, Child and Family Development Resource Center, Eastern Connecticut State University
Niloufar Rezai, Director, Child and Family Development Resource Center, Eastern Connecticut State University

Using an in-depth inquiry on balls, we will demonstrate a constructivist inspired, project-based curriculum called Investigations. Expand your understanding of taking a common item such as a ball to engage children’s curiosity and sense of wonder while promoting critical thinking skills, physics, and concepts of trajectory.

Recommended audience: Pre-K

5. The Montessori Approach to Math

Orla Black, Primary Teacher age 3-6 and Program Coordinator, Montessori School of Greater Hartford

Acquire an overview of the Montessori approach to mathematics for children ages 3-6. Discover what is meant by an indirect preparation for math from a Montessori approach. Participants will explore math concepts through the use of Montessori’s concrete math materials.

Recommended audience: Pre-K

6. Developmentally Appropriate Math Activities Aligned with Standards

Jessica L. MacLeod, Instructor, University of Rhode Island Child Development Center

Several hands-on math activities appropriate for preschool will be introduced during this session. There will be a focus on aligning developmentally appropriate math activities with rigorous academic standards. This session will offer strategies for: facilitating small group math instruction, individualizing math activities for a range of abilities, and infusing math into all aspects of children’s daily experiences. Participants will have opportunities to share their own expertise, play with sample activities, engage in small and large group discussions, and develop plans for integrating new ideas into their curriculum planning.

Recommended audience: Pre-K

7. Exploring Food in the Preschool Classroom

Carolyn Mercer, Preschool Teacher, Wintonbury Early Childhood Magnet School

Do your children bring the same foods for lunch every day? Would you like to expose children to different types of food? Learn ideas for incorporating new food into children’s diets, encouraging healthy eating habits, and making connections to preschool learning objectives.

Recommended audience: Pre-K
8. Incorporating the Arts with Science and Math
Diana Scalzo, Coordinator of the Preschool Program and Teacher, Hamden Hall Country Day School
Karen Papacoda, Head Teacher 3-5 Year Old Program, Housatonic Community College Early Childhood Lab School

Children enjoy learning about math and science concepts that are relevant to their world. They are naturally creative and curious. Explore many ways to integrate the arts (music, art, literature, and creative dramatics) to enhance science and math curricula. Through the use of these art forms, children will gain a better understanding of and develop a joy for science and math.

Recommended audience: Pre-K

9. Literature-Based Math and Science Exploration
Deborah Roe, Head of Children’s Services, Windsor Public Library

Learn how to use the latest and greatest in children’s literature as a jumping-off point for exploring math and science. In this hands-on workshop, you will create activities to bring back to the classroom and learn how to integrate math, science, and literature in a way that leads to authentic learning opportunities for children.

Recommended audience: Pre-K

10. Do You Play with Your Food? Maybe You Should
Michael Ruzza, Head Teacher, Mount Olive Child Development Center

Cooking can be and is science. There are many fun and educational science experiences found in the kitchen. This workshop will help you explore cooking chemistry and the science of foods.

Recommended audience: Pre-K

11. Is Your Science Center Dead or Alive?
Phyllis Winer, Teacher, The School for Young Children at the University of Saint Joseph
Jackie Sanderson, Teacher, The School for Young Children at the University of Saint Joseph

Tips, techniques, and ideas to bring your science area to life! How can you use common classroom materials to make this happen? We will show you!

Recommended audience: Pre-K

12. Mathematics Throughout the Year
Deb Wegh, Head Teacher, Farmington Collaborative Preschool; Adjunct Instructor in Early Childhood Education at Tunxis Community College

Join us as we brainstorm mathematics activities for the four seasons, based on the CT Preschool Standards. We will talk about books, songs, finger plays, math centers, and outdoor fun. Come with your own ideas and get many new ones in this interactive, hands-on journey through the school year.

Recommended audience: Pre-K

13. The Toddler’s Mathematical Mind
Tomiko Odorczuk, Toddler Teacher 15 months-3 years, Montessori School of Greater Hartford

Math is all around the young child from day one. Mathematics, like language, is the product of the human intellect and is crucial in understanding our surroundings. The mathematical mind tends to estimate and quantify; see identity, similarity, differences, and patterns; make order and sequence; and control error.

The infant and young child observes and experiences the world through their senses. From this experience, the child abstracts concepts and qualities of the things in the environment. These concepts allow the child to create mental order. The toddler establishes a mental map, which supports adaptation to the environment and the changes which may occur in it. The small toddler understands the concrete forms of math long before counting and traditional mathematical symbols are introduced. This workshop will focus on the many ways in which the Montessori teacher helps the small child in the development of their mathematical mind.

Recommended audience: Infant/Toddler
Diana Wehrell-Grabowski, Ph.D., Chief Executive Officer and Principal Owner, Mobile Science Education Consulting Services

STEM (science, technology, engineering, and math) is the latest buzz word in the education arena. STEM involves helping children explore the world around them through the use of their senses and intellectual skills. During this workshop, participants will learn how to integrate current classroom practices with STEM applications and concepts. They will observe patterns and shapes in nature, man-made objects, and building structures; use simple measuring tools; design and build ramps; and more. All STEM explorations are appropriate for the early childhood classroom. They are easy to implement, affordable, and often use free and/or recyclable materials. Incorporating STEM practices and concepts into the early childhood classroom will help support children's overall academic growth, as well as their early critical thinking and problem-solving skills.

Recommended audience: All

15. Hidden In Plain Sight: Children Discovering the Great Outdoors in Their Own Backyards
David K. Leff, Essayist, Poet, Former Deputy Commissioner of the CT Department of Environmental Protection

We will focus on stimulating children's curiosity about the natural world, which will lead to a sense of self-discovery. Looking, noticing, and questioning will be emphasized. We will start with a classroom overview, spend significant time outdoors rain or shine (dress appropriately), and then return to the classroom for discussion.

Recommended audience: Pre-K

16. Environmental Experiences for Early Childhood
Lori Paradis Brant, Education Director, Connecticut Forest & Park Association (CFPA)

Use trees and the forest as a window into the world with Project Learning Tree's (PLT) early childhood curriculum. Delve into learning stations that include exploring nature with five senses, meeting neighborhood trees, and experiencing trees through the seasons. A fun music CD features songs from children's musician Billy B. that encourage children to sing, dance, and move. Connect with a national network of other environmental educators and become eligible for funding through PLT's GreenWorks grant program. Receive PLT's Environmental Experiences for Early Childhood activity guide and its accompanying music CD. Curriculum is correlated to NAEYC, NAAEE, and Head Start Child Outcomes Framework.

Recommended audience: Pre-K

17. Nature in a Nutshell!
Margaret Schuster, Assistant Park Naturalist, Westmoor Park, Town of West Hartford

Getting outdoors is beneficial to the physical and mental health of children. In this workshop, spend time outdoors learning new ways to incorporate nature into all of your lessons. Let’s start with something very common and easy to observe – the squirrel. Then, we will apply what we learn to other aspects of nature. Various animals and artifacts will be shared. There will be an abundant supply of materials for participants.

Dress for the outdoors, as we will spend part of the time outside.

Recommended audience: Pre-K
18. Geometry in the Preschool Classroom

Irene Garneau,
Early Childhood Instructional Coach,
Wintonbury Early Childhood Magnet School

Jenny Levinson, Preschool Teacher,
Wintonbury Early Childhood Magnet School

Not a math person? Neither were we! Join us as we share our journey of learning to love math in the preschool classroom. We will explore teaching shapes and spatial relationships through meaningful, authentic play-based experiences. Participants will leave with small group and center-based activity ideas and assessment strategies.

Recommended audience: Pre-K


Priscilla Woyke,
Early Childhood Education Consultant,
Adjunct Faculty at Norwalk Community College

Participants will create math and science manipulatives and games to take back to the classroom to use in a study of bees, butterflies, and other insects.

Please bring scissors.

Recommended audience: Pre-K

20. Young Scientists: Creating Environments for Curious Thinkers

Julianna Golas, Adjunct Professor,
University of Rhode Island Human Development & Family Studies Department

In Rudyard Kipling’s tale of a curious mongoose, Riki Tiki Tavi exclaims, “There are more things to find out about in this house than all my family could find out in all their lives. I shall certainly stay and find out.” This quote is a reminder of the innate curiosity of the toddler. The workshop will help caregivers design an environment and curriculum that will appeal to the investigative nature of the toddler and will certainly make them want to “stay and find out.”

Recommended audience: Infant/Toddler

21. Music, Math, and Movement, Oh My!

Colleen Sprague-Bretthauer,
Music Specialist, Eastbury School

Susie Sandall, Math/Science Specialist, Eastbury School

Shari Burns, Teacher, Eastbury School

Need to add some spice to teaching patterning? Counting? The concept of more or less? This session is for you! Learn songs, fingerplays, and movement games to teach and reinforce math concepts. Each participant will receive a booklet of all song lyrics and activities, a CD of all original and folk songs, and a bibliography/discography of materials used.

Recommended audience: Pre-K

22. Using Developmental Science to Promote Early Numeracy: Research-Based Strategies for Helping Children Learn Math

Anna Shusterman, Assistant Professor of Psychology & Director of Cognitive Development Lab, Wesleyan University

The principle of cardinality – the idea that the last number in a counting sequence represents the total number of items – is foundational for learning mathematics and is a key concept in the Common Core kindergarten standards. Participants will learn about cutting-edge research on how preschool children acquire mathematical concepts like cardinality, and gain strategies for using these research-based concepts in the classroom. Topics will include (1) how infant’s and children’s brains are equipped to think about numbers and quantities; (2) how language learning is related to math development; and (3) the stages children go through as they learn counting and cardinality. Participants will leave with a field-tested collection of research-based activities and strategies to use in their own preschool classrooms.

Recommended audience: Pre-K
23. Properties of Matter: Solids, Liquids, and Gases ... Oh My!
Corinne Johnson, Staff Scientist, Connecticut Science Center

The Connecticut Science Center’s teaching model is geared towards hands-on, experiential learning which has shown to increase students’ interest. What better time and place to spark a student’s curiosity in science than in the Pre-K classroom? Scientists organize all matter into three forms or phases: solids, liquids and gases. This workshop will offer participants a series of specific, inquiry-based investigations that can be facilitated within the science classroom.
Recommended audience: Pre-K

24. eemarts for Iggy & Me
Joann McCann, Educational Consultant, Capitol Region Education Council

Energy consciousness begins at an early age. eemarts is an Energy Efficiency program available to schools in Connecticut at no cost through support from the Connecticut Energy Efficiency Fund. The program is aligned with the Connecticut Mathematics and Science Curriculum Frameworks. For younger students, big books are combined with activities that help them begin to explore energy usage in the world and the importance of conservation. The workshop will feature the book, Iggy & Me, Energy-Saving Door Hangers (conservation tips), and tips for saving energy in the classroom.
Recommended audience: Pre-K

Susan Keefe, Teacher, Preschool-Kindergarten, University of Rhode Island Child Development Center

Children are naturally curious and inquisitive about how the world works. Learn how to use “Process Investigations” to encourage active exploration in young children, leading to construction of new knowledge. We will explore such topics as spinning, catapulting, magnetism, balancing, blowing, rolling, and melting. Hands-on materials, PowerPoint photos, and video clips will allow participants to learn first-hand how to create activities that support children’s scientific inquiry throughout the classroom, beyond the science table, and beyond bubbles!
Recommended audience: Pre-K

Looking for new ideas to add to your curriculum?

Visit The School for Young Children for an evening Open House.

Individuals and groups have the opportunity to:
- Use teacher resource materials
- View documentation panels and teacher display shelves
- View classroom environments
- Gather new curriculum ideas to use in the classroom

For dates, visit the Professional Development section of our website at www.usj.edu/syc

Follow us on www.facebook.com/schoolforyoungchildren

Pictured left to right: Gene F. H’04 and Kathleen Bruyette ’49, H’04, Beth Bye, and Anita and Harry Keefe

“... It is our fervent hope that this Keefe-Bruyette Symposium will assist you in doing your work more effectively.
And if through your participation it enhances your personal passion for your calling, it will indeed be a huge success.”

~ Gene F. Bruyette H’04,
First Symposium, Fall 2002
Keefe-Bruyette Symposium Registration
March 25, 2013

Please print clearly.

Name: ______________________________ Title: __________________

School/Organization: ______________________________

Address: ___________________________________________________________________

City: _______________________ State: _______ Zip: ______________

Daytime Telephone: (________) _______________________ Email: _______________________

Age group you work with: ______________________________

Please indicate your choice from the following registration options:

☐ Full Day: Keynote Address, Morning Workshop, Lunch, Afternoon Workshop, Tour The School for Young Children (SYC) - $80
☐ 1/2 day a.m.: Keynote Address, Morning Workshop, Lunch - $65
☐ 1/2 day p.m.: Lunch, Afternoon Workshop, Tour of SYC - $65
☐ Student Fee: $50 (full-time student)

Morning Workshop Selection (Workshops 1-13)

1st Choice: ___________________________________________________________________
2nd Choice: ___________________________________________________________________
3rd Choice: ___________________________________________________________________

Afternoon Workshop Selection (Workshops 14-25)

1st Choice: ___________________________________________________________________
2nd Choice: ___________________________________________________________________
3rd Choice: ___________________________________________________________________

General Information

Questions or special needs can be directed to:
The School for Young Children
Diane Morton, Director, at 860.231.5565
Email: dmorton@usj.edu
or
Sue O’Donnell, Laboratory School Coordinator, at 860.231.5561
Email: sodonnell@usj.edu

Please note that every effort will be made to assign you to your first-choice workshop selection. However, confirmation of workshop registration will not be provided.

Directions

Visit the University of Saint Joseph website, www.usj.edu, for directions.

Weather

In the event of severe weather, please call 860.231.5560 on the morning of the event, or tune to WFSB-3 or WVIT-30.

The Keefe-Bruyette Symposium will be held on the University of Saint Joseph campus, 1678 Asylum Avenue, West Hartford, Connecticut.

Please make checks payable to: University of Saint Joseph
Send registration forms with payment or purchase order to:
The School for Young Children, 238 Steele Rd., West Hartford, CT 06117-2791
Fax: 860.231.5581

Please note that every effort will be made to assign you to your first-choice workshop selection. However, confirmation of workshop registration will not be provided.
Explore greatness.

The School for Young Children
West Hartford, CT 06117

Keefe-Bruyette Symposium, March 25, 2013
Hands-on Workshops on Math and Science Teaching for Infant/Toddler and Pre-K