



The School for Young Children
at Saint Joseph College

presents

The Ninth Annual Keefe-Bruyette Symposium

Investigation and Inquiry in Math and Science for Young Children

featuring

Judi Stevenson-Garcia, Ed.M.

Monday, March 14, 2011



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



Scientific Inquiry

“Playing in nature is key to children’s early development — helping them to be happier, healthier and smarter, more creative, and more self-confident.”

— Cheryl Charles, Ph.D.
President and CEO, Children’s Nature Network



Mathematics Investigations

“The most important connection for early childhood mathematics development is between the intuitive, informal mathematics that students have learned through their own experience and the mathematics they are learning in school.”

— National Council of Teachers of Mathematics

Welcome

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

Workshops are designed with practicing teachers in mind. Our presenters bring a wide range of experience to the workshops and include those who work with children in a classroom setting, conduct research, and develop programs. They offer concrete examples and ideas that can be used in your classroom.

Please use the registration form on the last page to sign up for both morning and afternoon workshops. Be sure to include second and third choices to ensure placement in a workshop of interest to you.

Schedule

Registration takes place in
The Bruyette Athenaeum at Saint Joseph College

8:15 a.m. - 8:45 a.m.	Registration - The Bruyette Athenaeum at Saint Joseph College
9:00 a.m. - 10:00 a.m.	Keynote Address “Raising the Standards for Early Mathematics Education: Policies and Practice” Judi Stevenson-Garcia, Ed.M. (See page 2)
10:15 a.m. - 11:45 a.m.	Morning Workshops (See pages 4–9)
12:00 p.m. - 1:00 p.m.	Lunch
1:15 p.m. - 3:15 p.m.	Afternoon Workshops (See pages 10–13)
3:15 p.m. - 4:00 p.m.	Tour The School for Young Children



Keynote Address

“Raising the Standards for Early Mathematics Education: Policies and Practice”

Judi Stevenson-Garcia, Ed.M.

Ms. Stevenson-Garcia will share the most recent research regarding young children’s mathematical abilities, best practices for teaching math and assessing learning in the early years, and policy recommendations for improving learning outcomes. She will describe promising practices currently being implemented in schools around the country and will provide concrete, research-based “next-step” recommendations for improving practice.

Using data from large-scale studies as well as ethnographic “stories from the field,” Stevenson-Garcia will address both the immediate need to raise standards for teaching and learning, as well as the real joys of engaging in mathematics experiences with young children.



Judi Stevenson-Garcia, Ed.M.

Judi Stevenson-Garcia is an educator, researcher, teacher mentor, and early childhood advocate. She is endlessly curious about the ways in which children think about and learn mathematics and is dedicated to sharing her passion with other educators.

As a research project coordinator for the National Institute for Early Education Research (NIEER) and a doctoral candidate at Teachers College, Columbia University, she has extensive field experience observing teachers and classrooms around the country. She uses field data and teacher and child interviews to inform the development of best practices in early childhood mathematics instruction. She is the lead designer for the development of the Preschool Rating Instrument for Science and Mathematics (PRISM), a research-based assessment instrument used to evaluate the quality of math and science materials and instructional supports in preschool classrooms. The companion self-assessment instrument, the Self Evaluation for Science and Mathematics Education (SESAME), is designed for use by administrators and teachers to inform practice by participating in “reflective coaching cycles.”

Judi has co-authored several math policy papers, including “Math and Science in Preschool: Policies and Practice,” a NIEER policy brief, and “Mathematics Education for Young Children: What It is and How to Promote It,” a social policy report for the Society for Research in Child Development. She has consulted on several early childhood mathematics-related projects, including the development of the Early Learning Scale, a performance-based assessment for preschool and kindergarten children, and collaborated with the Texas Department of Education to develop a standards-based assessment system for kindergarten through grade 3. She has consulted with the Head Start Family Literacy Center, assisting with the development of a “trainer of trainers” module for mentor coaches and the development of their new early childhood mathematics online course. She is currently working with the Rhode Island Department of Education to support the improvement of math and science teaching in their pilot state-funded pre-K program, and is the professional development coordinator for a four-year National Science Foundation research study looking at the impact of high-quality math and science instruction on the language development of preschool dual language learners.

Before beginning her work at NIEER, Judi spent several years teaching preschool, as well as first, fifth, and sixth grades. She holds a B.A. in Early Childhood Education and Psychology from The College of New Jersey and an Ed.M. in Developmental Psychology from Rutgers University. Her dissertation work at Teachers College is focused on early childhood mathematics and professional development.

Morning Workshops

90-Minute Blocks



1. Having Fun With Geometry

- *Judi Stevenson-Garcia, Research Project Coordinator, National Institute for Early Education Research (NIEER)*

Research demonstrates that young children spend the majority of their daily mathematical experiences engaged in learning about geometric and spatial concepts. Learn how to organize your classroom to support the learning of these concepts. Work together to design various learning centers to encourage children's thinking about geometry, and take home hands-on learning activities that will engage and excite young children.

Recommended audience: All

2. Math-Fun² x 2

- *Antoinette Cianciolo, Teacher, Saint Mary's Hospital Child Development Center*
- *Monica Jacobson, Teacher, Saint Mary's Hospital Child Development Center*

You don't have to be Einstein to find math in your class every day! This workshop will focus on how to create daily activities that are math-rich and how to find opportunities to expand children's mathematical thought processes.

Recommended audience: Grade Pre-K

3. Exploring Shapes in Space with the Frogonauts

- *Tutita Casa, Assistant Professor, University of Connecticut*
- *Janine Firmender, Research Assistant, University of Connecticut*

Explore the exciting new geometry unit in which students learn all about shapes while helping Farley and Freeda, frogonauts at the Lily Pad Space Station. Learn how students build models with 3-D shapes, navigate shapes, and develop spatial memory as they recreate shapes on the space station Control Panel. The curriculum uses research-based teaching and learning enrichment strategies to provide engaging investigations for young students at all levels. Participants will leave with classroom-ready activities for use with their students.

Recommended audience: Grades K-1

4. Digital Video: A Tool for Documenting and Evaluating Children Using the Connecticut Preschool Benchmarks

- *Sudha Swaminathan, Professor, Eastern Connecticut State University*
- *Claudia Ahern, Preschool Head Teacher, Child and Family Development Resource Center, Eastern Connecticut State University*

Participants will engage in an informative and interactive session on using digital video to assess children's thinking

and learning. We will share instructional guidelines and classroom examples for intentional documentation using digital video. We will discuss and facilitate the evaluation of these digital videos according to the Connecticut Preschool Benchmarks.

Recommended audience: Grade Pre-K

5. Science Says: Build It!

- *Stephanie Kadam, Program Coordinator, Stepping Stones Museum for Children*
- *Manirah Agans, Program Delivery Manager, Stepping Stones Museum for Children*

Release your imagination into the scientific world of building and design! This workshop emphasizes the process of exploration and creativity, not the product. Build ramps and roller coasters to move balls, cars, and more as we experiment, observe, and share discoveries about size, balance, and gravity.

Recommended audience: Grade Pre-K

6. Science Activities to Support and



Nurture Each Child's Curiosity and Need to Investigate the World

- *Karen Papacoda, Head Teacher, Housatonic Community College Early Childhood Lab School*
- *Diana Scalzo, Early Childhood Admissions Coordinator & Teacher, Hamden Hall Country Day School*

This workshop will provide quality, intentional science activities to use in your preschool classroom, as well as ways to integrate math concepts within these experiences. These activities align with the Connecticut Preschool Assessment Framework Performance Standards in Science and Math. Through guided investigations, children learn to develop inquiry and observation skills which lead to building theories and further investigations.

Recommended audience: Grade Pre-K

7. Teachers Who Share Are Teachers Who Care



- *Laura McDonnell, Teacher, Grade 1, Roaring Brook School*
- *Lisa Fenn, Teacher, Grade 1, Roaring Brook School*

This workshop will focus on teacher tips, ideas, activities and inquiry investigations in math, science, and language arts. Participants will gather ideas and learn about developing successful learning opportunities. Leave with exciting curriculum plans to use in your classroom the next day. Do you have an idea to share? Participate in a “Teacher’s Show and Share” by bringing along one of your favorite activities or ideas. You are welcome to bring your digital camera.

Recommended audience: Grades K–1

8. Bones: Child-Initiated/Teacher-Supported Science Explorations in Preschool

- *Niloufar Rezai, Preschool Teacher, Child and Family Development Resource Center, Eastern Connecticut State University*
- *Cynthia DeJesus, Teacher Associate, Child and Family Development Resource Center, Eastern Connecticut State University*

Explore the process of planning, implementing, and assessing an in-depth investigation on bones with preschoolers. Using the Investigations Curriculum, presenters will share the development of the topic (including webbing), hands-on activities supporting construction of knowledge, as well as assessment and data collection during the investigation. Workshop participants will also observe the critical role of the dramatic play center in facilitating and fostering opportunities to connect to science inquiry.

Recommended audience: Grade Pre-K



9. The Montessori Approach to Math for the Primary Child - 3 to 6 year olds

- *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 three to six. Discover what is meant by an indirect preparation for math from a Montessori approach. Participants will explore math concepts through use of Montessori’s concrete math materials.

Recommended audience: Grades K–1

10. The Young Mathematician

- Diane Morton, Director, *The School for Young Children at Saint Joseph College*

Learn the developmental sequence that young children progress through as they develop mathematical concepts such as number sense and counting. Explore ways to design your classroom environment to offer opportunities to encourage children to think mathematically and reflect on ways to incorporate “math talk” into your daily dialogue with children.

Recommended audience: Grade Pre-K



11. E³ = Early Energy Efficiency

- Bob Borello, Associate Director, *Project for Increased Mastery in Mathematics and Science*
- Kirsten Brooks, *eesmarts Program Administrator*
- Rebecca Meyer, *eesmarts Program Administrator*

Energy consciousness should begin at an early age; *eesmarts* is a free energy efficiency program available to schools and educational centers in Connecticut through support from the Connecticut Energy Efficiency Fund. The program is aligned with both the Connecticut Mathematics and Science Curriculum Frameworks. Big books are combined with activities that help students begin to explore energy usage and the importance of conservation. The workshop will review the program, the big books, and do activities related to *eesmarts*.

Recommended audience: All

12. Designing and Implementing

Integrated, In-Depth Science Studies for Young Children

- Marcy Sala, Head Teacher, *Early Childhood Program, The Common School*
- Jean Meister, Head Teacher, *Early Childhood Program, The Common School*

This workshop will help illuminate the rich opportunities for integrated learning within the realm of science. Explore the various components to consider in planning an integrated, in-depth science study for young children. Learn how to provide opportunities for observation and inquiry; social learning and collaboration; imaginative play and dramatization; and a range of literacy, math, and motor experiences. Participants will leave with new activities and curriculum design ideas.

Recommended audience: Grade Pre-K

13. Properties of Matter

- Karen Rubin, Outreach Manager, *Connecticut Science Center*

Participants will come away from this workshop with hands-on experiments comparing solids, liquids, and gases. Learn the states of matter, their properties and why they behave the way they do.

Recommended audience: Grade Pre-K

14. Exploring Nature Right Outside



Your Front Door

- Sue O'Donnell, Teacher/Grant Coordinator, *The School for Young Children at Saint Joseph College*

Urban and suburban settings offer many opportunities for nature exploration. Learn how to utilize the outdoor resources at your school to expand children's understanding of their environment, nature and the seasons. We will spend time on the nature trail and field. Please dress appropriately for this workshop.

Recommended audience: Grade Pre-K

Afternoon Workshops

2-Hour Blocks



Thinking About Children's Mathematical Thinking

- *Judi Stevenson-Garcia, Research Project Coordinator, National Institute for Early Education Research (NIEER)*

How do you know what your students really know about math? Learn how to use the basic components of performance-based assessment, including observation, focused tasks, and flexible interviews. Discover what children's errors tell you about what they really know and what their correct answers don't tell you. Leave with strategies to help you engage with children at a deeper level and enhance your daily math interactions.

Recommended audience: All

16. 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 curiosity in children about the natural world that 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: Grades K-1

17. Exploring Math in the Great Outdoors!

- *Deb Wegb, Head Teacher, Farmington Collaborative Preschool*

Children learn throughout their day, whether inside or outside. Join us as we discover ways to encourage mathematical knowledge in experiences outside of the classroom. During this workshop you will make a game to share with your class during your next trip outdoors. NAEYC Standards and Connecticut Preschool Standards will be referenced throughout the workshop.

Recommended audience: Grade Pre-K

18. Crazy and Fun - Let's Go Nuts!

- *Margaret Schuster, Assistant Park Naturalist, Westmoor Park, Town of West Hartford*

Spend some 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: Grade Pre-K

19. Math - Can We Do It? Yes, We Can!

- *Michelle Dent, Owner/Director, Cheshire Country Day School*

Bring out the mathematician in every child through hands-on, sensory learning experience. Participants will explore the integration of math activities into every learning center. The workshop will also look at the Project Approach as a way to extend children's learning through real-life experiences.

Recommended audience: Grade Pre-K



20. Integrating Nature into your Curriculum with Math and Science Manipulatives

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

Participants will create math and science manipulatives to take back and use in the classroom. Manipulatives will have a focus on nature and will address seasonal changes in the environment.

Recommended audience: Grade Pre-K



21. Properties of Matter

- Karen Rubin, *Outreach Manager, Connecticut Science Center*

Participants will come away from this workshop with hands-on experiments comparing solids, liquids, and gases. Learn the states of matter, their properties and why they behave the way they do.

Recommended audience: Grade Pre-K

22. Exploring Nature with Preschoolers to Support Language Development

- Paquita Jarman-Smith, *Early Childhood Consultant, State Education Resource Center*
- Anne Marie Davidson, *Early Childhood Consultant, State Education Resource Center*

Children are natural-born scientists. Bringing nature to young children sets the stage for investigation and exploratory learning that is a natural springboard to language development. In this interactive, hands-on workshop, you will learn how to support families and preschool teachers as they explore nature with young children.

Recommended audience: Grade Pre-K



23. Music, Math, and Movement - Oh My!

- Colleen Sprague-Bretthauer, *Music Specialist, K-5, Eastbury School*
- Susie Sandall, *Math Specialist, K-5, Eastbury School*

Need to add some spice to teaching patterning? Counting? The concept of more or less? This session is for you! Learn songs, finger plays, and movement games to teach and reinforce first-grade math skills. 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: Grades K-1



Looking for new ideas to add to your curriculum?



Plan to 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 Web site at www.sjc.edu/syc**

“... 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 Annual Symposium, Fall 2002



We are pleased to announce the second scholarship donation from Farmington Bank. Farmington Bank has sponsored scholarships totaling \$1,500 to fund the participation of 20 employees from the Brighter Futures Family Centers to attend our 9th Annual Keefe Bruyette Symposium. The Centers serve Hartford's Frog Hollow, Sheldon/Charter Oak, Blue Hills, Southwest, Asylum Hill, and Parkville neighborhoods.

Thank you, Farmington Bank.

We are truly grateful for your leadership and generosity.



General Information

Questions or special needs can be directed to:

The School for Young Children
 Diane Morton, Director at 860.231.5565
 E-mail: dmorton@sjc.edu

or

Sue O'Donnell, Teacher/Grant Coordinator at 860.231.5561
 E-mail: sodonnell@sjc.edu

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

Directions

Directions to Saint Joseph College are available on the Web site at www.sjc.edu.

Weather

In the event of severe weather, please call 860.231.5560 on the morning of the event.

Keefe-Bruyette Symposium Registration

March 14, 2011

Name: _____ Title: _____

School/Organization: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: () _____ E-mail Address: _____

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) – \$75
- ½ day a.m.: Keynote Address, Morning Workshop, Lunch – \$60
- ½ day p.m.: Lunch, Afternoon Workshop, Tour SYC – \$60
- Student Fee: \$50 (full-time student)

Morning Workshop Selection (Workshops 1-14)

1st Choice: _____

2nd Choice: _____

3rd Choice: _____

Afternoon Workshop Selection (Workshops 15-23)

1st Choice: _____

2nd Choice: _____

3rd Choice: _____

Please make checks payable to: Saint Joseph College

Send registration forms with payment to:
 The School for Young Children
 238 Steele Rd., West Hartford, CT 06117-2791

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



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Keefe-Bruyette Symposium, March 14, 2011

Hands-On Workshops on Math and Science Teaching in Pre-K to Grade 1