

STEM and Early Childhood Play

Science, Technology, Engineering and Math. What does it look like in early childhood? It looks like play!

I told my staff that we were doing an issue of Child Development Today with a focus on STEM (Science, Technology, Engineering and Math), and one response was: “Those are all VERY WEAK KNOWLEDGE areas for ME!!!!!!” How many of us feel that way? But we all use STEM knowledge and techniques every day. When we compare two tomatoes in the grocery store, when we make a phone call, when we stack books on a shelf, when we estimate the cost of our purchases, we are using our knowledge of STEM. So what is STEM really? According to the *STEM Sprouts Teaching Guide* from the Boston Children’s Museum:

“Science is a way of thinking. Science is observing and experimenting, making predictions, sharing discoveries, asking questions, and wondering how things work.

Technology is a way of doing. Technology is using tools, being inventive, identifying problems, and making things work.

Engineering is a way of doing. Engineering is solving problems, using a variety of materials, designing and creating, and building things that work.

Math is a way of measuring. Math is sequencing (1, 2, 3, 4...), patterning (1, 2, 1, 2, 1, 2...), and exploring shapes (triangle, square, circle), volume (holds more or less), and size (bigger, less than).”

<http://www.bostonchildrensmuseum.org/sites/default/files/pdfs/STEMGuide.pdf>

Children are naturally curious, and curiosity leads to

experimentation. Presented with carefully chosen materials, your scientists will ask their own questions and pose their own hypotheses.

You can help children expand their knowledge by asking questions. The best questions you can ask are “what” questions:

- What will happen if?
- What do you see?
- What could you change?
- What might fit there?

These are thinking questions - there isn’t just one right answer.

To help your scientists explore their world they need to use technology. What? They need computers?! -

Well, maybe, but technology is the tools we use to solve problems, so for preschoolers that is scissors, pencils, hammers, etc.. So, give your scientists the tools they need, and teach them how to use them.

Engineering happens in the block area, but it can also happen in the dramatic play area, the art area, outdoors, or wherever there is a problem to solve. Keep encouraging your engineers with those “what” questions and you will see plenty of problem solving.

And of course as they are asking questions, using tools and solving problems, they will need a way to measure things. You can help them count, measure, create patterns, and explore shapes, volume and size.

So, even if you don’t feel like a STEM expert, just remember: In early childhood, STEM is child’s play!

Anne A. Withers

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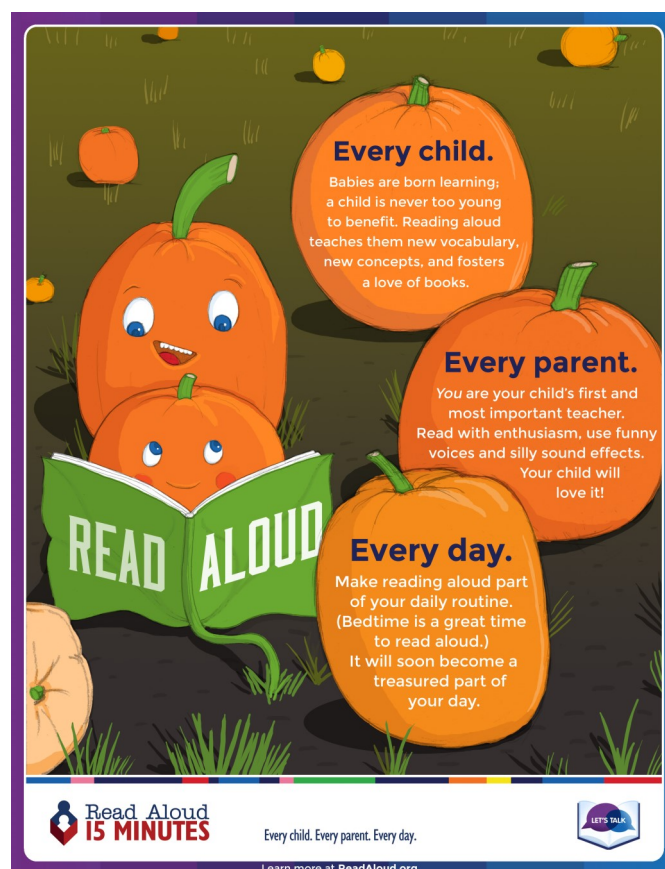
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Find us on facebook!

Our Early Childhood Community

We asked you : "What does STEM look like in your program?"

Cleaning and cooking pumpkins so we can make cookies tomorrow
Brenda FDC



Daily Update

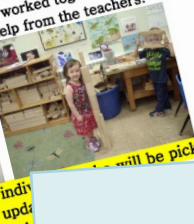
Date: September 18, 2015

Overview:
Hello everybody and happy Friday! We had another great day here at the TC3 Child Care Center. We read a cool color book, did a science experiment, and also had fun with art and outside time. Let's take a look at some highlights!

Circle Time:
We had a very interesting circle time today. We started by reading a funny book called 'A Bad Case of Stripes'. Not only is it funny with silly pictures but it also has a nice lesson about being who you are. During circle time, we also got an up close look at real honey comb thanks to Eleanor. It was very interesting to look at the shapes and feel the texture of it. Later on we even tasted it: some of liked and some didn't, but that's OK because we tried something new!



Construction:
There were some new things to do in the room today that included all kinds of fun play tools, safety goggles, saw, and explore. We used the various new items we found to build, hammer, saw, and explore. We also worked together to build a VERY tall tower out of blocks with no help from the teachers!



Notes: -Please bring in pictures of individual children so we can update our display.
-Next week we'll be doing 'red & blue shapes' and we'll like to bring in from home.

This is a nice example of science and engineering at the fundamental stage. We do a daily update each day to parents so they can see learning through play and exploration. I feel daily documentation including parent communication is important
Johanna
TC3 Child Care Center

We introduce STEM topics through daily activities and routines, such as talking about what we see while on a walk or outdoors. This summer we grew a garden and the children enjoyed picking, eating and talking about the vegetables. This fall we introduced a unit on Monarch butterflies, and after talking about Monarch butterflies, went on a search for a chrysalis in a field with milkweeds, and followed up with The Hungry Caterpillar book.
Greg and Mary Alice GFDC



News & Notes

The Sciencenter Offers \$1 Admission for EBT Cardholders

The Sciencenter offers reduced admission for low-income families under a national program called *Museums for All*. The program offers \$1 admission to anyone in a family presenting an Electronic Benefits Transfer (EBT) card at the admissions desk. EBT is the electronic system used by states to issue SNAP (nutrition assistance) and other benefits to low-income families.

Museums for All, as well as other Sciencenter initiatives such as the *Membership Access Program* (free membership for families with children who qualify for free or reduced-price lunch at school), and the *Agency Pass Program* (free family admission passes for clients of human service agencies within 75 miles) are made possible through donations to the Sciencenter's Annual Fund.

Please contact the Sciencenter at 607-272-0600, or info@sciencenter.org, with any questions.

FALL EXHIBITION NOW OPEN

Embark on a magical, hands-on adventure while discovering how patterns, from symmetry to spirals, shape the world around us at our featured fall exhibition, *Pattern Wizardry*. www.sciencenter.org/featured-exhibition.html

SPOOKY SCIENCE: OCTOBER 25

Calling all goblins, monsters, and superheroes, join us on October 25 from 12 - 4 pm for the Sciencenter's annual FREE Halloween event. Put on your best costume and come explore tricked-out exhibits, spooky activities, and eerie demonstrations. Sponsored by Rheonix. www.sciencenter.org/calendar.html

SCIENCE TOGETHER: NEW 6-WEEK SERIES

Explore science with your toddlers and preschoolers (ages 2 - 5). Discover how children learn like scientists through hands-on sensory activities, stories, and songs. Sciencenter educators will also share research-based parenting tips in an interactive, fun environment.

Each session is limited to 10 families. Email vfiordalis@sciencenter.org to sign up today!

Wednesdays and Saturdays starting October 14 & 17, 10:30 am www.sciencenter.org/programs.html

October 24th Conference on Girls and STEM

AAUW-Ithaca will host a conference on science, technology, engineering and math (STEM) for girls of different ages on Saturday, October 24, 2015, at the Paleontological Research Institution/Museum of the Earth. The conference is entitled *From Mud Pies to Dinosaur Bones: Encouraging Girls' Interest in STEM* and will run from 9:00 AM to 3:00 PM. The morning schedule includes:

Sara Silverstone, Director, Empire State STEM Learning Network Finger Lakes Regional Hub, presenting a general overview of research on girls and STEM;

Ellie Fulmer, Assistant Professor, Education Department, Ithaca College, and Sally Wolfe, Teacher, Allentown, PA School District, discussing STEM for preschool and elementary school girls;

Patrice Torcivia Prusko, Instructional Designer in Academic Technologies, Cornell Information Technologies, describing Massively Open Online Courses (MOOCs) for middle and high school girls.

A catered lunch made from fresh, local ingredients is included in the registration fee.

After lunch the line-up includes:

Illa Burbank, President of IthacaSTEM Advocates, discussing STEM for high school girls;

Warren Allmon, Director of the Paleontological Research Institution and its Museum of the Earth, on the life and work of Katherine Palmer, PRI's second director;

A self-guided tour of the Museum; admission is also included in your registration fee.

Please join AAUW-Ithaca for this informative event. The registration fee is **\$30 per attendee**. To register, please send a check made out to *AAUW-Ithaca* with *D3 Conference* in the memo line to:

Madeleine Hemmings
18 Ryans Way
Ithaca, NY 14850

Please include your name, address, telephone number, e-mail address and your affiliation in your reply. Registrations must be submitted by October 9, 2015.

For more information about the Museum and directions to the facility go to: <http://www.priweb.org/index.php?>

For additional information, please contact Sarah L. Johnson, SLJithaca@aol.com.

Cavity Free Kids

Are your kids excited about brushing their teeth, eating tooth-healthy foods, drinking water, and visiting the dentist? Kids in the Cavity Free Kids program are!

Thanks to a grant from the Health Foundation for Western and Central NY, family child care providers and center staff in Cortland and Tompkins Counties have been trained to use the Cavity Free Kids curriculum. As you can see from the smiling faces below, it is lots of fun! Kids love learning about their important baby teeth, and they are starting healthy habits to last a lifetime. The program helps families learn about dental health too, and providers have been able to help families find dental care for their children.



The children in Norma Switzer's family day care are excited to show the projects they worked on in the Cavity Free Kids program.



Megan Wise from TC Action and Sue Sopp from Child Development Council educate the public about dental health.

Do you want your kids to be Cavity Free Kids? Sue Sopp and Judy Kern will be starting another round of Cavity Free Kids training in 2016. If you are interested, contact Sue or Judy.

Stay tuned for more information.

Let's fill Cortland and Tompkins Counties with smiling faces!

10/27, 29, 11/4, 5 Health & Safety Series

Cortland Office 5:30 pm to 9:30 pm

Dixie Vaber, Child Care Specialist

Caring for children in family or group family child care is a big responsibility. The health and safety of children in care is the highest priority for both the provider and for the NYS Office of Children and Family Services. This training is required to ensure that new providers are prepared for the demands of the job. The training is presented in four sessions and covers many topics including: Creating a Safe Environment, Developing Health Care Policies and Procedures, Planning for Emergencies, Diaper Changing, Cleaning and Sanitizing, Food Safety, and Your Role as a Mandated Reporter. This competency-based curriculum requires the successful completion of written and demonstration tests. The series also serves as a good refresher for experienced providers.

Cost: \$235 for the series

Rebate is available for new providers. EIP is available for registered/licensed providers. Call for information.

OCFS Topics: 2,4,5,6,7,8,9 CDA Topics: 1,4,5,6

10/14/2015 Risk Assessment and Outdoor Play

Cortland Office 6:00 pm to 8:00 pm

Linda Grisel, Child Development Center UPK and Supervising Lead Teacher

Did you know that a play environment can be too safe? In the past twenty years play spaces have been “sterilized”.

Learn how children can gain necessary risk assessment and problem solving skills in these ultra safe spaces. Suggestions on how to tweak your play space will be presented.

✱Cost: \$30 (eligible for Early Bird and Membership discounts) OCFS Topics: 1, 3, 4 CDA Topics: 1, 2, 3

10/28/2015 Connecting Children With Nature Every Day – Fall and Winter

Cortland Office 6:00 pm to 8:00 pm

Presented by: Elaine Sturges

You are invited to participate in this active, hands-on workshop! We'll focus on fun activities, songs, games, children's books, nature themes and materials that connect young children with nature during the fall and winter.

Elaine has 10 years of teaching experience at the early childhood level (preschool – 1st grade) and an additional 15 years of experience connecting children and teachers with nature.

✱Cost: \$30 (eligible for Early Bird and Membership discounts) OCFS Topics: 1, 3 CDA Topics: 2, 3

11/5/2015 Including Babies

Ithaca Office 6:00 pm – 8:00 pm

Jolie Ludwig, Infant Toddler Specialist – Family Enrichment Network, Inc.

As providers you serve families and children of all ages. Building relationships with your families is an important key in being able to effectively communicate observations and concerns. This opens the door for parents to ask questions that they may otherwise feel hesitant about asking. Parents and providers are all part of the same team, and by working together we can provide a foundation to help babies learn and grow. In the training we will discuss many areas of infant care, including feeding, how to do floor time, and why one primary caregiver from birth to three gives infants their best start. If you are hesitant to provide infant care please bring your questions so we can openly discuss concerns among providers.

✱Cost: \$30 (eligible for Early Bird and Membership discounts) OCFS topics 1,2,3,4

11/17/2015 Children's Festivals From Many Lands

Ithaca Office 6:00 to 8:00 pm

Suzanne Foote, Director of East Ithaca Preschool

This is a 'make it and take it' workshop; you'll go home with plenty of new craft ideas and samples that you will make. A veteran early childhood teacher, Suzanne was a child care provider at home for over a decade and then worked in other programs including Head Start; she is now in her 12th year at East Ithaca Preschool. Her classes include children from many countries, and Suzanne regularly plans crafts, games, food and other examples of different cultures in her program's daily activities. Creating art from leftovers, Suzanne will demonstrate how to recycle materials as a part of preschool education.

✱Cost: \$30 (eligible for Early Bird and Membership discounts) OCFS topic: 3 CDA Topics: 3, 4

12/2/2015 Changing Behavior in a Positive Way

Cortland Office 6:00 pm to 8:00 pm

Jolie Ludwig, Infant Toddler Specialist – Family Enrichment Network, Inc.

Come learn some proven techniques to improve behaviors in your classroom. Infants and toddlers learn through relationships. We will look at creating healthy nurturing relationships with our children to provide them the solid base to explore the world. By providing positive guidance as well as helping children make positive choices we will decrease negative behaviors. The social emotional child needs to be an integrated part of your curriculum. By implementing conscious discipline every day into your routine you will be promoting a positive climate and helping your children to problem solve as well.

✱ Cost: \$30 (eligible for Early Bird and Membership discounts) OCFS Topics: 1,3 CDA Topics: 3, 4, 8

12/10/15 Early Literacy and Music – Jammin’ With Judy!

Ithaca Office 6:00 pm – 8:00 pm

Judy Stock – Musician, Educator, Entertainer

Becoming ‘literate’ is a big job that adults can encourage every day in many ways. Children learn with all their senses, and in this participatory workshop Judy Stock will show you how to connect music and literacy. Judy will share what she has learned from children and teachers during her twenty plus years of working in early childhood classrooms. You will leave with many new ideas for your program – simple rhythms, chanting, how to use songs you already know in new ways, and musical ‘instruments’ that are easy to learn. Comments from a previous workshop with Judy – “Lots of great songs, homemade instruments”, “It was awesome!” Learn more at www.judystock.com

✱ Cost: \$ 30 (eligible for Early Bird and Membership discounts) OCFS topics 1, 3 CDA Topics: 2, 8

1/20/2106 Reading and More: Literacy in Early Childhood

Cortland Office 6:00 pm to 8:00 pm

Presented by Beth Kanalley and Nancy Hatch from Family Reading Partnership

Whether you work in a child care program, own a family child care program, care for children, or are a parent, grandparent, etc. you want children to succeed in school and life. Learning to read is a key to success, and learning to read starts at birth! Learn how to be a child’s first teacher. Learn how to speak with children, how to read to them, and how to expand on the ideas in books. This is a hands-on workshop, and you will go home with lots of ideas, and a book to read with your kids.

Cost: FREE OCFS Topics: 1, 3 CDA Topics: 8, 2, 3

Toddler Literacy: What Counts and What Works

(This is a Distance Learning Course. Learn on your own computer and at your own pace, with personalized teacher interaction.)

When it comes to literacy, toddlers are right in the prime time to develop the foundation for all future learning. In this course we will look at what toddlers are like, how they learn and how we make decisions about our work with them. You’ll learn literacy concepts that really count and literacy practices that really work with toddlers.

Receive six hours of training credit.

For more information, or to schedule your personal 10-day training period, call 753-0106 or email

anne@childdevelopmentcouncil.org

Cost: \$60 OCFS Topics: 1, 3 CDA Topics: 8,2

✱ CHILD DEVELOPMENT COUNCIL TRAINING DISCOUNTS (LOOK FOR DISCOUNTED TRAININGS)

✱ Membership Discount: A current Child Development Council membership qualifies you for a \$5 member’s discount.

✱ Early Bird Discount: Registration and payment received one week before training date qualifies for a \$5 Early Bird Discount.

Being both a Member and an Early Bird gives you a \$10 discount per training!

SUNY Video Conferences -

- SUNY Video Conferences are held at both Council offices - Site #619 (Tompkins) or Site #621 (Cortland)
- Video Conferences are from 6:45 to 9:15
- At Ithaca Office the doors are locked at 7:15 pm. No entry will be allowed after that time.
- At Cortland Office the doors are always locked after 5:00 pm. To enter training please ring doorbell.

THE REMAINING VIDEO CONFERENCE DATES FOR 2015 ARE:

- 10/22/2015 Child Abuse and Maltreatment with a Focus on Understanding Brain Injury and Prevention
- 11/19/2015 Town Hall Meeting: Managing Challenging Behavior

For more information check the website: www.ecetp.pdp.albany.edu
 To register, complete the registration form found at www.ecetp.pdp.albany.edu and return it to: Early Childhood Education and Training Program, 22 Corporate Woods Blvd., 3rd Floor, Albany, NY 12211 or fax to: (518) 443-5941 or register online at www.ecetp.pdp.albany.edu . If you have questions, please call ECETP at (518) 443-5940 or toll-free at (800) 295-9616.

OFFICE OF CHILDREN AND FAMILY SERVICES REQUIRED TOPICS

Providers are required by the New York State Office of Children and Family Services (OCFS) to take a minimum of thirty (30) hours of training during every 2 year period. Fifteen hours of such training must be received during the first six months of a new licensure, registration or of new employment by a program. This training must address the following topics:

- | | |
|---|--|
| 1. Principles of Early Childhood Development | 6. Child Abuse & Maltreatment Identification & Prevention |
| 2. Nutrition & Health Needs of Infants & Children | 7. Statutes & Regulations Pertaining to Child Day Care |
| 3. Child Day Care Program Development | 8. Statutes & Regulations Pertaining to Child Abuse & Maltreatment |
| 4. Safety and Security Procedures | 9. Shaken Baby Syndrome |
| 5. Business Record Maintenance and Management | |

On Saturday, October 17th, we will be hosting the

13th Annual SACC Conference

at GIAC, 301 West Court Street, Ithaca from 9:00 am-3:00 pm.

In total, staff can receive up to 4.5 training hours.

A light breakfast and lunch will be provided.

Cost per staff member is \$50.





REGISTRATION FORM

Please help us keep your information up-to-date. Fill in all the fields below.

First Name: _____ Last Name: _____

Local Address: _____

Phone: _____ Email: _____

Primary Language: _____ Other Language: _____

Highest Level of Education: _____ Date Attained: _____

Current Employer: _____ Date Started: _____

Current Position: _____ License/Registration #: _____

Please check one: ☐ Info hasn't changed since last registration ☐ Info has changed.

Date	Name of Class	Training Cost
	I am a current member of the Council <input type="checkbox"/> Membership Discounts:	
	Early Bird Discounts:	

Total Payment Enclosed(Training Cost minus Discounts): _____

* CHILD DEVELOPMENT COUNCIL TRAINING DISCOUNTS

Child Development Council training workshops marked with a "*" qualify for the following discounts:

* Membership Discount: A current Child Development Council membership qualifies you for a \$5 member's discount.

* Early Bird Discount: Registration and payment received one week or more before training date can qualify for a \$5 Early Bird Discount. **Being both a Member and an Early Bird gives you a \$10 discount per training!**

Early registration is highly recommended for all workshops. Registration is not complete until a registration form and payment are received. Total payment must be made by the early registration date of the first workshop you want to attend. We cannot refund registration fees or exchange workshops. You may transfer the workshop to another provider if you cannot attend. If the Council cancels a workshop due to low attendance, bad weather or some other unforeseen circumstance, we will make every effort to contact those who have been registered for the class and credit will be provided for use towards another workshop.

Please send completed form and payment to:

Child Development Council, 609 W. Clinton St., Ithaca, NY 14850
 (For Ithaca training)

Or

Child Development Council, 111 Port Watson St, Cortland, NY 13045
 (For Cortland training)

Child Development Council Early Childhood Training Program is partially funded by United Way



Straw Blown Painting

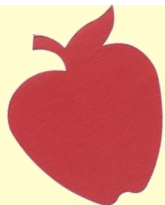
MATERIALS:

- Watercolor paper or card stock — we used 8.5 x 11 card stock from the office supply store. A heavier weight paper will do a good job absorbing the paint and water.
- Liquid watercolors. We like to use [Sax Concentrated Liquid Watercolors from Amazon](#). They're washable and non-toxic.
- Eye droppers or [pipettes](#). If you don't have a pipette, you can forage your medicine cabinet for a medicine dropper.
- Straws
- Tray to hold the paper. This keeps the paint from blowing all over the table
- Paper towels, sponge, or towels. Optional, but you won't regret this insurance policy

BLOW PAINTING STEPS

1. Set up a tray with a heavy sheet of paper
2. Place a few bowls filled with a bit of liquid watercolors nearby. Place a pipette in or next to the watercolors.
3. Invite your child to draw watercolor paint into the dropper and then squeeze it on the paper.
4. With a straw, blow the paint around the paper.





Have you visited our Member's Corner?

We have three die-cut machines and an assortment of dies, a laminating machine and a book-binding machine. We also have a library of resource books, as well as some children's books. We have a lending closet of toys to supplement those at your program.

All resources are free for members of the Child Development Council

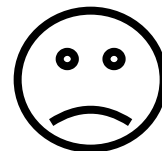
(Non-members can use equipment for a fee)

The Member's Corner is open from 9:00 to 4:30 Monday through Friday.

We know that it can be hard to get away from your program during the week. **If you would like to use the Member's Corner on a Saturday or evening**, contact Anne to make an appointment. 753-0106 or anne@childdevelopmentcouncil.org



Not a Child Development Council Member?



Join now!



Join Today!

Yes I want to be a member of the Child Development Council for 2015.

(Membership year runs April through March.)

- My Membership Certificate shows my professionalism.
- I will use the training discount to get great training at a reasonable price.
- I want to use the resources in the Member's Corner to enhance my program.
- I want to make a difference in the lives of children and families in Cortland and Tompkins County.

Please mail to:
Child Development Council
111 Port Watson St.
Cortland, NY 13045
or
609 West Clinton Street
Ithaca, NY 14850

THANK YOU FOR YOUR SUPPORT!

NAME: _____

ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____

PHONE: _____ EMAIL: _____

Please circle one: Individual (\$30) Group (\$45) Center (\$80) School Age (\$80) **PAYMENT ENCLOSED:** \$ _____



child development council

609 West Clinton Street
Ithaca, NY 14850-5255



Meetings

Nursery School Directors, 3rd Wed. @ 1:00pm

October 21 - Trumansburg Nursery School

November 18 - East Ithaca Preschool

December 16 - TBA

Tompkins Center Directors, last Wed. @ 1:30pm Child

Development Council, Ithaca

October 28

November/December - TBA

Cortland Center Directors, 2nd Friday @ Noon - call to
confirm schedule and topics

SACC Directors, 2nd Tues. @ 10:30am

October 13

November 10

December 8

Events and Closings

We will be closed :

October 12 - Columbus

November 26 & 27 - Thanksgiving

December 24 & 25 - Christmas

