

# Greeting Children's Creativity: Makers Spaces for Children



Bridget Alexander, Executive Director of Waking the Village



Libraries are  
in a strong  
position to  
make arts  
education  
accessible to  
**ALL.**

# Advocating for Play

Libraries are an accessible institution that can model the power of play and arts engagement.

- Educate parents that play is an evolutionary, child directed impulse to pursue activities that develop the sensory centers on the timeline that works best for that individual child

# Play is Learning!

- Adults forget that nurturing the motor and sensory centers behind reading, writing, and calculating is the true work of early childhood.
- Children naturally work these systems in play.
- Libraries can set up environments that invite play and the sensory development that promotes literacy and future learning.

USA is experiencing a creativity crisis.



# Harvard Educational Review

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## Articles

Children's Need to Know: Curiosity in School  
and at Home

The Work Children Do: Unpacking Gendered  
Conflict in an Elementary Classroom

DAVID COVAT  
EMILY N. YELLON

An Important Part of Me: A Dialogue  
About Difference

EMILY COOK  
WENDY LITWALL

## The Creativity Crisis: The Decrease in Creative Thinking Scores on the Torrance Tests of Creative Thinking

Kyung Hee Kim

*School of Education, The College of William and Mary*

The *Torrance Tests of Creative Thinking* (TTCT) was developed in 1966 and renamed five times: in 1974, 1984, 1990, 1998, and 2008. The total sample for all six normative samples included 272,599 kindergarten through 12th grade students and adults. Analysis of the normative data showed that creative thinking scores remained static or decreased, starting at sixth grade. Results also indicated that since 1990, even as IQ scores have risen, creative thinking scores have significantly decreased. The decrease for kindergartners through third graders was the most significant.

Research shows that intelligence is increasing (Ceci, 1991; Ceci & Williams, 1997; Dickens & Flynn, 2001). Based on the test norms of the Stanford-Binet and Wechsler tests, Flynn (1984) concluded IQs have increased in the United States over the decades of the last century, which is now called the Flynn effect. Flynn (2007) later concluded IQs have increased worldwide during the past century; IQs on the Raven's Matrices and on the Similarities subtest of the Wechsler Intelligence Scale for Children (WISC) have gained by about 25 points; and IQs on the WISC Arithmetic, Information, and Vocabulary subtests have gained by about 3 points. Flynn (2007) explained the increase in IQs in terms of reduced inbreeding, improved nutrition, or increased affluence around the world.

Contemporaneous with the increase in IQs are increases in the average scores on the Scholastic Assessment Test (SAT, formerly called the Scholastic Aptitude Test). The SAT is one of the most widely used tests for making high-stakes decisions about educational opportunities, placements, and diagnoses. The SAT has traditionally been accepted as a specific aptitude measure to assess verbal and mathematical reasoning abilities, but it has a high correlation with IQ (Frey & Detterman, 2004). SAT average scores decreased in the 1960s and

1970s, and then remained stable with slight increases in the 1980s. Since the 1990s, however, the overall downward trend has been reversed (College Entrance Examination Board, 1993, 2008) and SAT average scores have increased, as IQs have increased.

### CHANGES IN CREATIVE THINKING

What of creative thinking? Creativity is distinct from intelligence. Have average levels of creative thinking changed, and if so, have they changed in the same pattern as IQ? The TTCT is a good measure to use when examining changes in the potential for creative thinking over time. That is because it is widely used and psychometrically sound. The TTCT was developed by Torrance in 1966. Although the TTCT has been used primarily as an assessment for the identification of gifted children, Torrance (1966) originally intended to use it as a basis for individualizing instruction for students with any ability level. The TTCT can be administered in either an individual or group testing environment from the level of kindergarten through adulthood. When predicting creative achievement, Kim (2008a) found scores on the TTCT predict ( $r = .33$ ) creative achievement better than other measures of creative or divergent thinking. The TTCT is utilized extensively in both the educational field and the corporate world, and it is more widely used and referenced than other measures of creative or divergent thinking. The TTCT has been translated into over 35 languages (Millar, 2002) and it is utilized worldwide.

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I thank Scholastic Testing Services, Inc., for providing access to the raw data sets and for their assistance in clarifying their data.

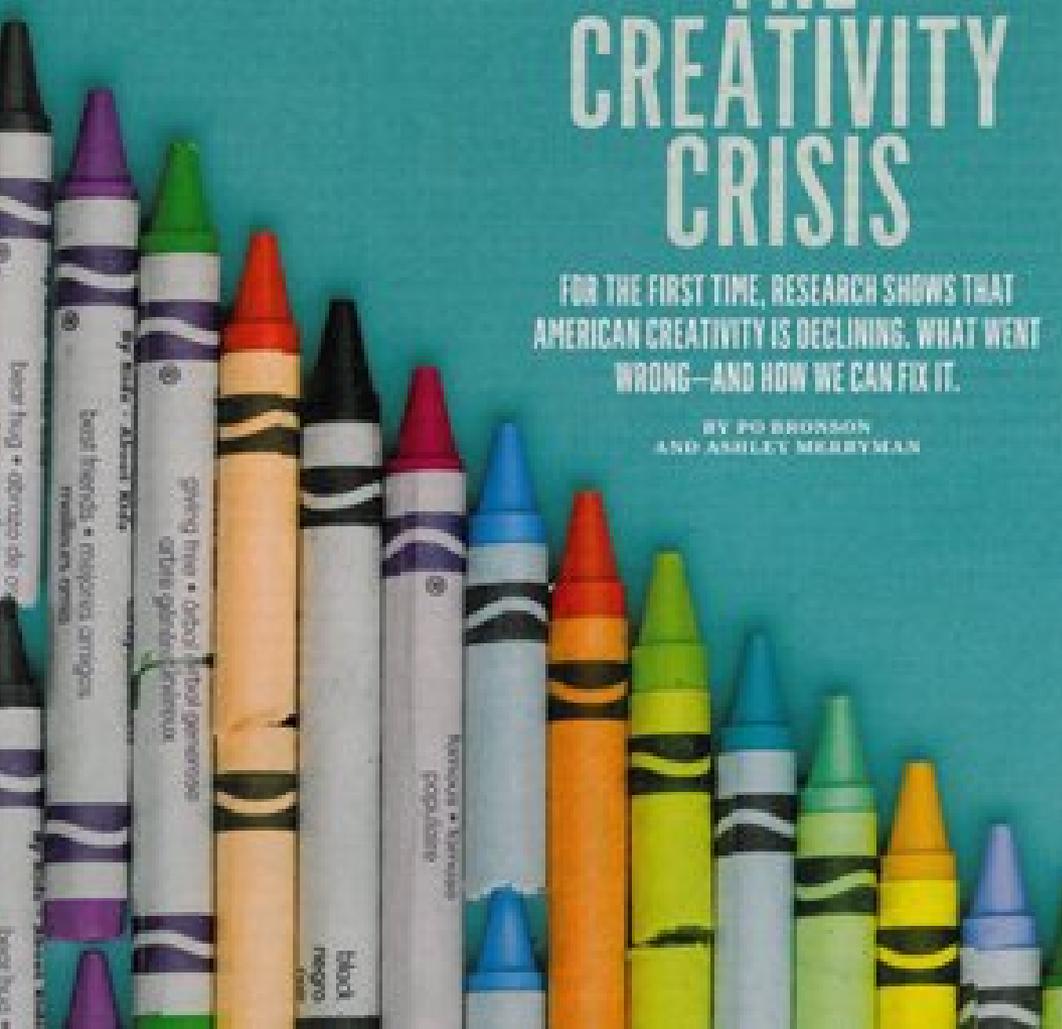
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SOCIETY INNOVATION

## THE CREATIVITY CRISIS

FOR THE FIRST TIME, RESEARCH SHOWS THAT  
AMERICAN CREATIVITY IS DECLINING. WHAT WENT  
WRONG—AND HOW WE CAN FIX IT.

BY PO BRONKH  
AND ANILEY MURPHY



“Kyung Hee Kim at the College of William & Mary discovered this after analyzing almost 300,000 Torrance scores of children and adults. Kim found creativity scores had been steadily rising, just like IQ scores, until 1990. Since then, creativity scores have consistently inched downward. “It’s very clear, and the decrease is very significant,” Kim says. It is the scores of younger children in America—from kindergarten through sixth grade—for whom the decline is “most serious.”

The potential consequences are sweeping. The necessity of human ingenuity is undisputed. A recent IBM poll of 1,500 CEOs identified creativity as the No. 1 leadership competency of the future. “

In Kim's words, the data indicate that "children have become less emotionally expressive, less energetic, less talkative and verbally expressive, less humorous, less imaginative, less unconventional, less lively and passionate, less perceptive, less apt to connect seemingly irrelevant things, less synthesizing, and less likely to see things from a different angle."

According to Kim's research, all aspects of creativity have declined, but the biggest decline is in the measure called Creative Elaboration, which assesses the ability to take a particular idea and expand on it in an interesting and novel way.



Art is a form of  
self expression.

# Process Art

- Allows each child to define how they want to engage
- Ensures every child can find a developmentally meaningful way to engage
- Invites experimentation rather than mastery of specific steps or skills
- Inspires focus and allows for layers of complexity.



Art  
experiences  
should not  
invite  
sameness.

Art should not require an instruction sheet.





Art should  
not have a  
deadline.

**Art should  
encourage  
creativity not  
conformity.**



Think of setting up an art experience  
in the same way you would think of  
setting up a science experiment.

Encourage tinkering.

Invite inventiveness.



Use Familiar Mediums in a New Way: Melted Crayon Exploration



Spend lots of time in the space where science meets art- and resist the urge to explain everything



Introduce new ways of manipulating mediums.



What looks to an adult as random and confusing is not so for a baby or child.

EVERYTHING is an invitation to explore, invent, create, and test.

Children are scientists on a constant quest to discern the possibilities of things.

How does this work?

What can this do?

What happens when you drop it, pull it, taste it, squish it, stomp it, throw it...?

Embrace the broadest definition of art and creativity.





Embrace Abstraction: Watercolors with Lemon Juice



Present art constantly as a form of exploration and playfulness- not replication.  
Oobleck and food dye bouncing on plastic wrap stretch over a speaker.



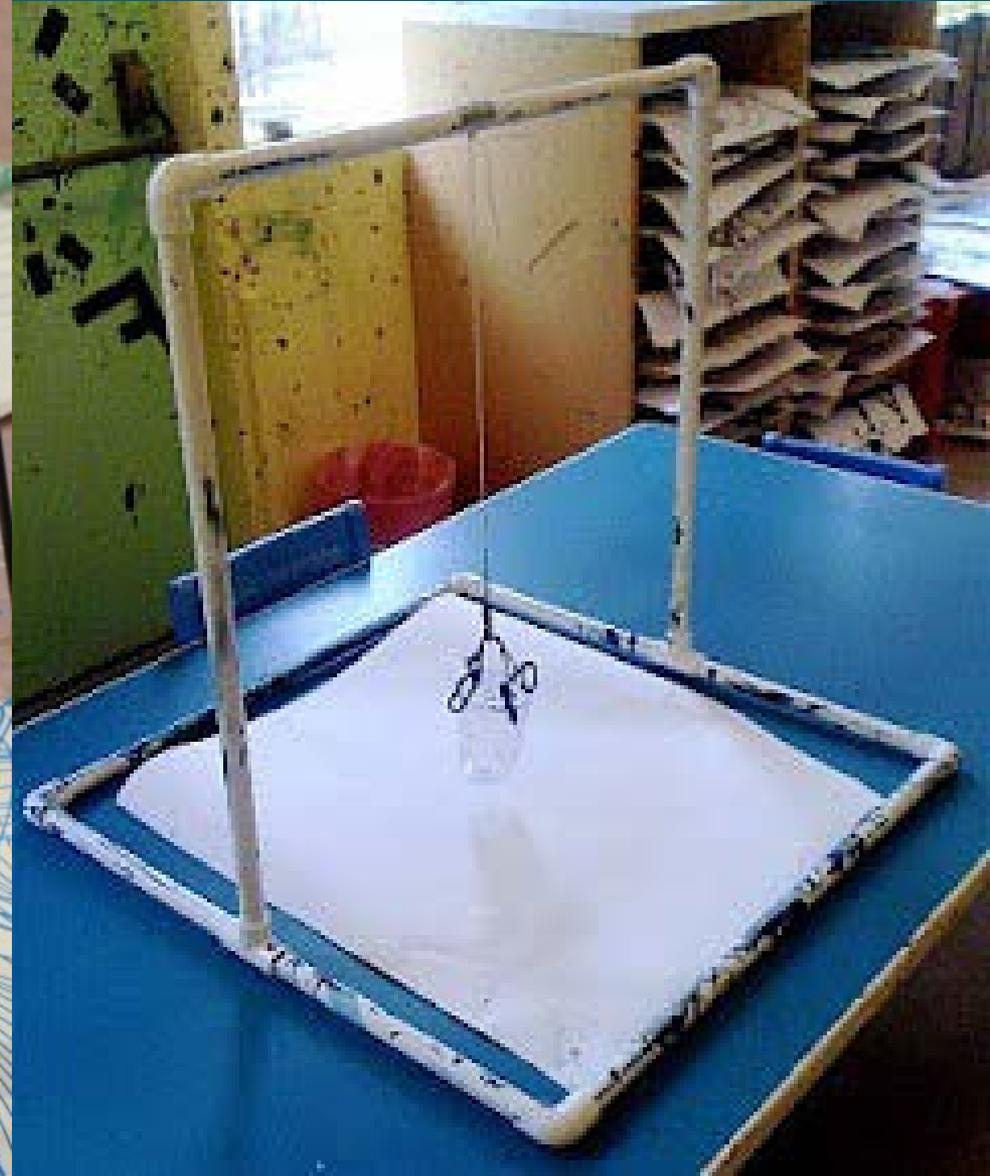
Sometimes art answers: "What if?"

Alka seltzer tablet, vinegar and paint trapped in a film canister

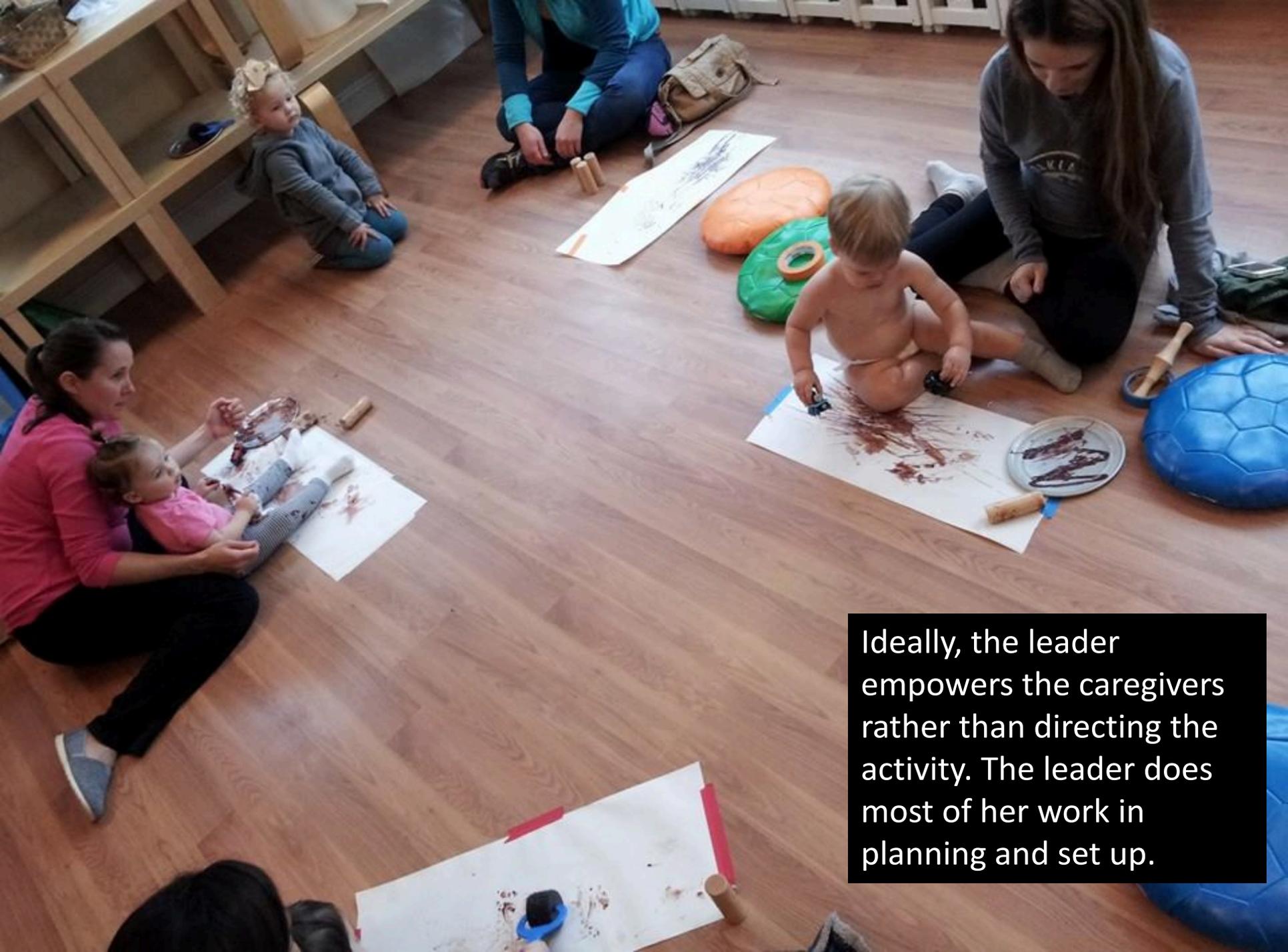


Offer art processes that are completely irresistible.

If the grown ups want to play too, you know you are on the right track.



It's all about the invitation. The space and supplies can be simple.



Ideally, the leader empowers the caregivers rather than directing the activity. The leader does most of her work in planning and set up.



Don't overthink  
what the kids  
need to do.

Present the  
offering and  
step back.

Paint squeezed into a  
balloon. Balloon filled with  
water and frozen overnight.



Supply buffets allow children to work right in their developmental zone.

Example Activity:

**Coffee Filter Art**

Buffet Items:

Liquid Watercolors

Eye Droppers

Foam Brushes

Bristles Brushes

Sponge Pieces

Markers

Coffee Filters

# Great Buffet Style Stations

Puppet Making

Fairy Houses

Boats

Cars

Dolls and Stuffed Animals

Ornaments

Paint Lab

Potion Making



With great process art, the adults will naturally engage, but still allow the children to lead and extend the possibilities.

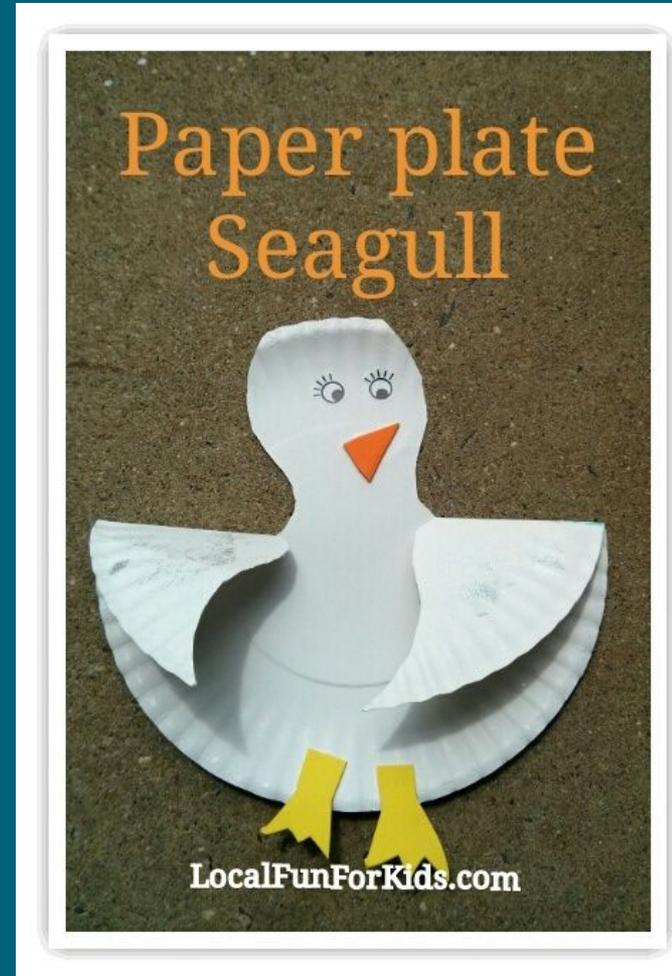
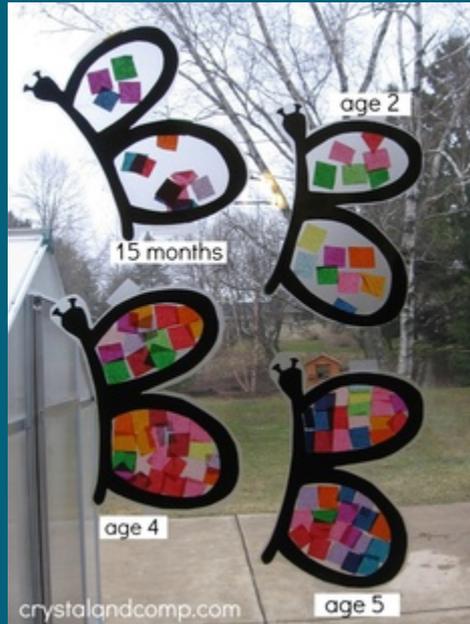
Left: Popsicle stick catapults shooting clay/paint.  
Top: Painting with magnets.



Collaborative creation can be done if you find the right project.

PVC pipe connected to build a sprinkler house invented by the children.

Indicators that you're moving  
away from a creative process



Warning Sign One: Paper plates, cups, lunch sacks or costco bulk items are involved.



# 10 Easy Kids Christmas Crafts

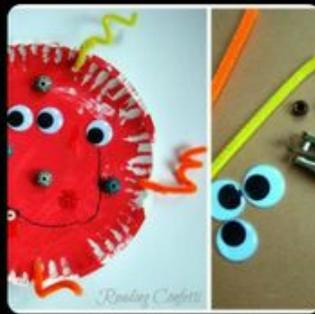
[www.TheFrugalNavyLife.com](http://www.TheFrugalNavyLife.com)



Warning Sign Two: The primary act of creating is gluing stuff onto things.



# 25 Kid-Friendly HALLOWEEN Crafts



Warning Sign Three: The primary motivation to create is to decorate for the holiday.

If there's a wrong way to do it-

**IT IS NOT PROCESS ART.**

**IT IS PROBABLY NOT ART AT ALL.**



This is art.











Artists claiming their own space.



If you want to bring people into your branch, creating a space to DO art is probably more meaningful than a place to display art.

Hang art on your walls, but fill your rooms and floor space with a space for community interaction and creativity.



The Learn and Play Space in the Children's Department at the Monroe County Public Library YES. This would be awesome.

But absolutely not mandatory.

In fact, the \$50,000+ to build that could buy a LOT of cool art supplies.



A room, a few tables and a stash of tarps will get you VERY far.

Don't have a room? A 12 by 12 foot square of open floor with a tarp on it and a few card tables can become a magical space.

## A Note on Themes

- Forces library staff to put theme before art experiences.
- Inspires a bunch of one time events that don't build a library community .
- They tend to be driven by a short term grant. This leads to a burst of funding that results in short term planning of Summer events and Big Reads instead of the long term planning that makes a library a community hub.
- Results in high pay for contract artists instead of developing your existing and invested library staff.

# Creating a Meaningful Art Space in Any Library



Offer a range of supplies.

Include “adult” art supplies.

Offer supplies that artists work with.

Artists don't use these supplies so  
why do we give them to children?

Foam Sheets

Glitter

Art Kits

Precut felt

Paper Plates

Stickers

Rubber Stamps

Precut Paper Shapes

Construction Paper

# Great Art Supplies for Kids

Paint: Watercolor, Acrylic, Tempera

Good Crayons: Stick and Block

Good Chalk

Clay

Fabric

Wool Roving

Yarn

Wire

Wood

Mud

IKEA Tidbits

Mosaic Elements

Doughs

PVC Pipe and Fittings

Wood

ANYTHING from Nature

An environment that invites  
creativity does not need to be well-  
stocked or organized.  
It needs to be inviting.

It needs to tempt.  
It needs to beckon.



This space did not look like this once it went into use.











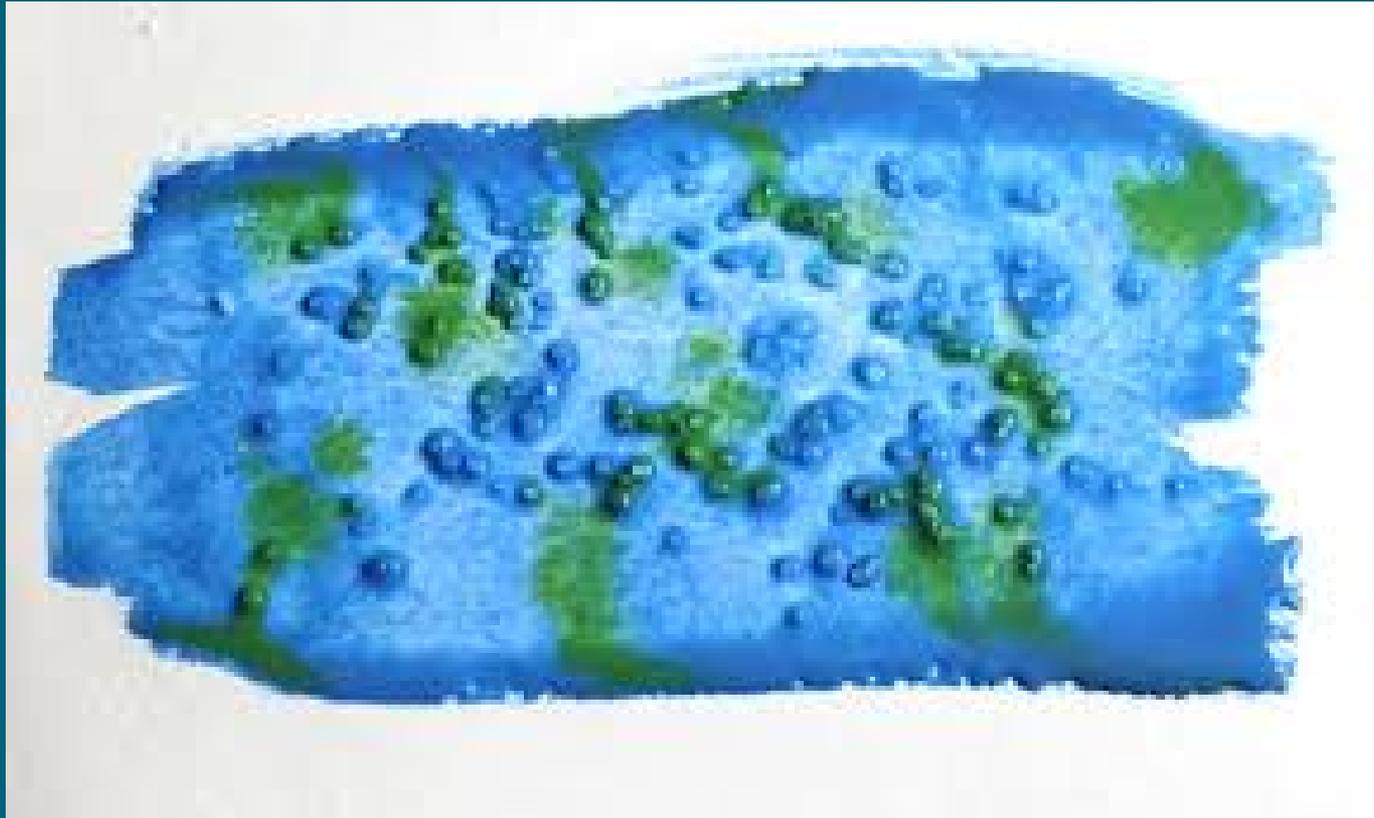
Center instruction on mediums  
not look-alike crafts.





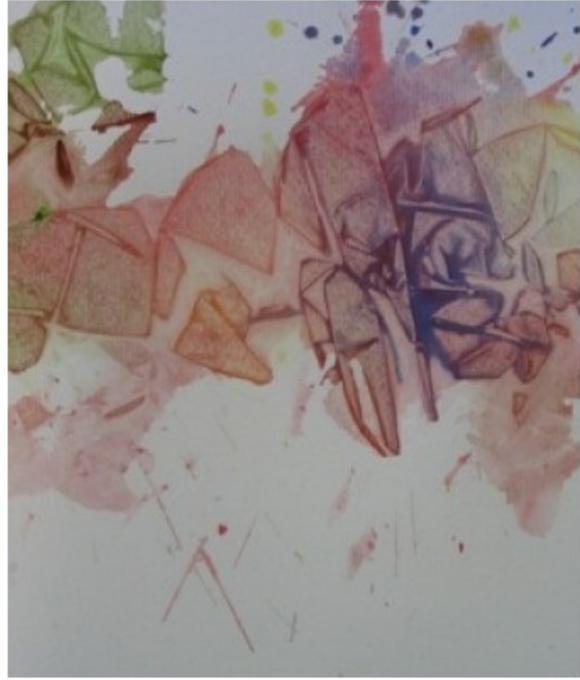


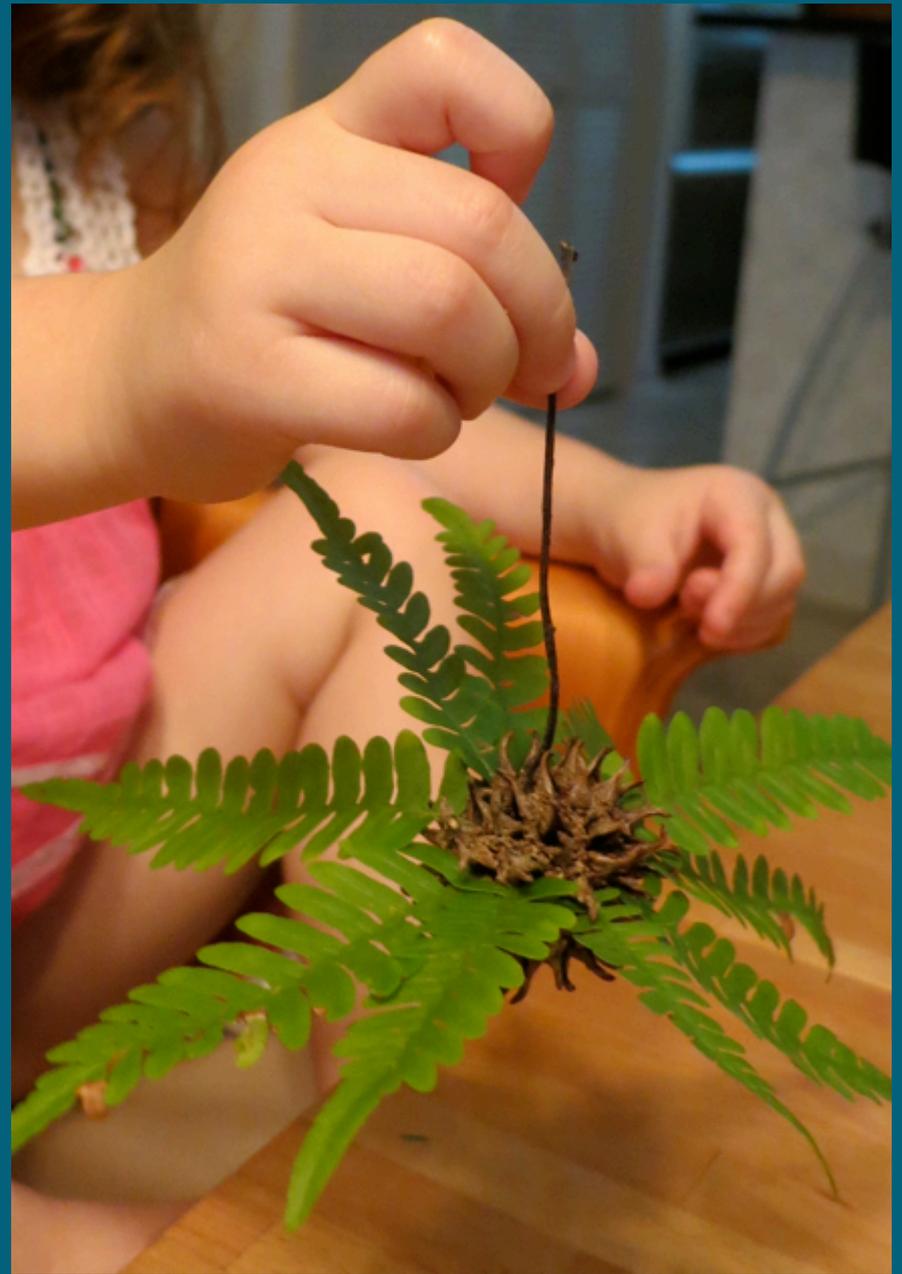






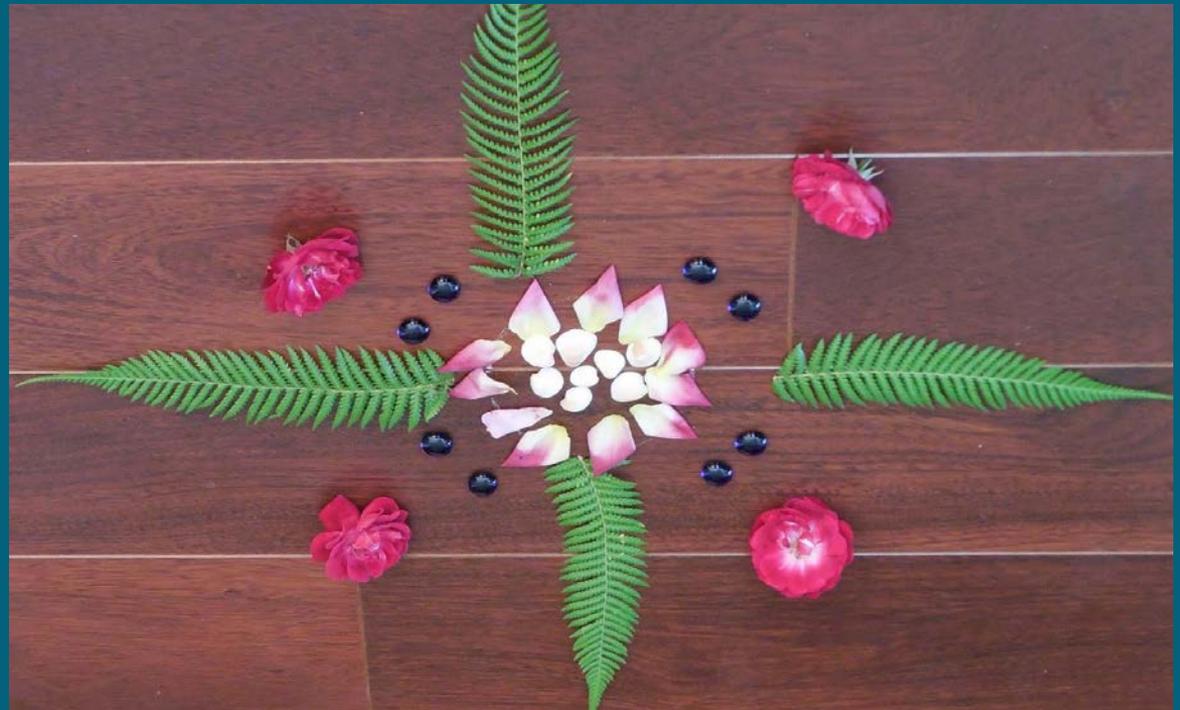
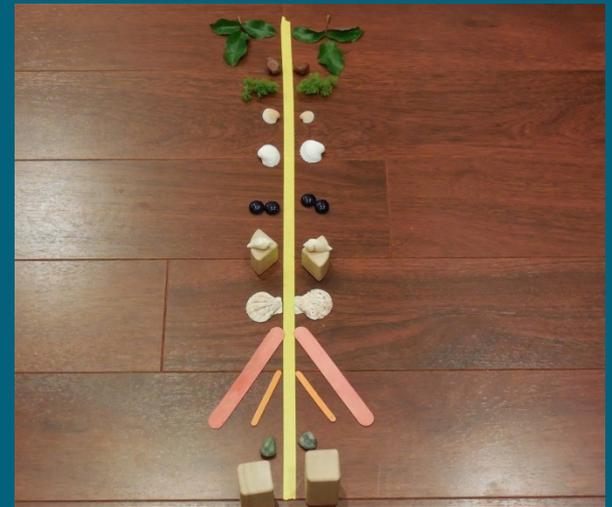








MAKING  
MANDALA ART



Expand your definition of what  
art is.







# Sensory Tables

Scientific exploration stations  
only with glitter and feathers















## Cloud Dough

8 cups flour

1 cup oil



## Moon Sand

4 cups sand

2 cups cornstarch

1 cup water





super sensory  
bottles



Squares



# Rainbow DISCOVERY BOTTLES

Straight



for exploring  
colors & shapes



Growing A Jeweled Rose

Circles



Round



Sparkles







# Examples of Art Beast Library Programs

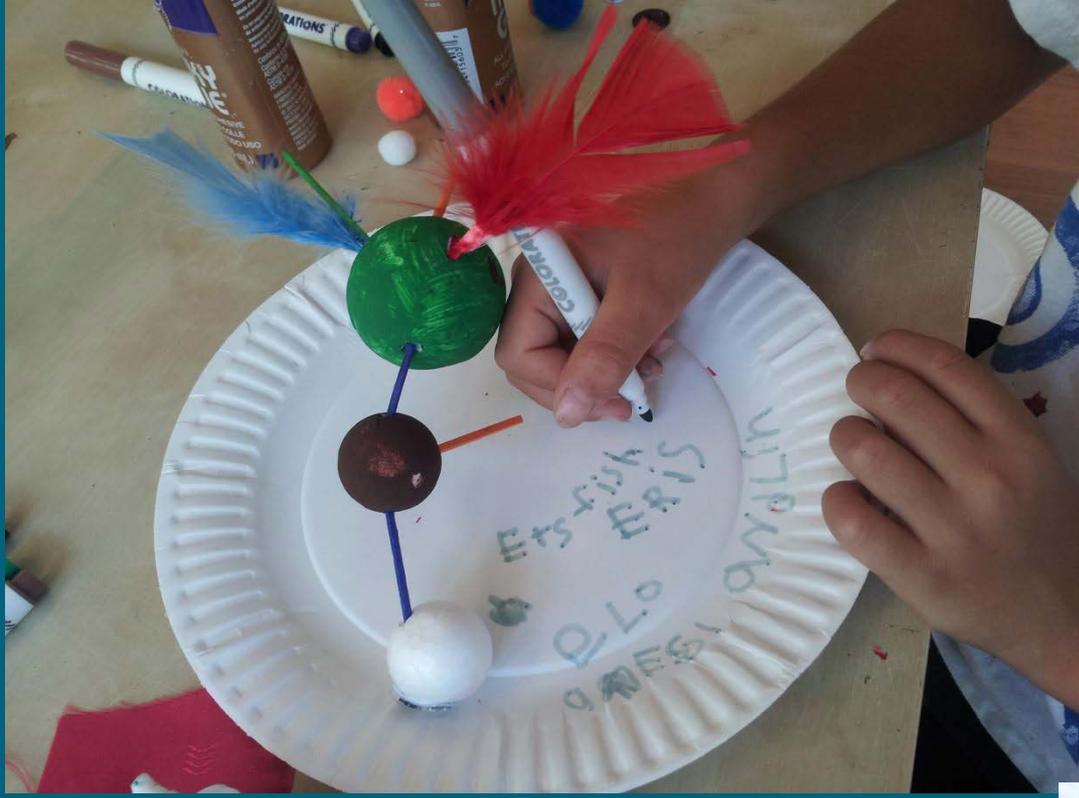












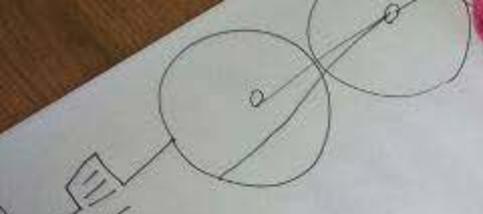




Jasmine

Quinn

Jackson







cute as a bug

*When my daughter was about seven years old, she asked me one day what I did at work. I told her I worked at the college- that my job was to teach people how to draw. She stared back at me, incredulous, and said, "You mean they forget?"*

*-Howard Ikemoto*

# 5 Children's Books and Connected Arts:

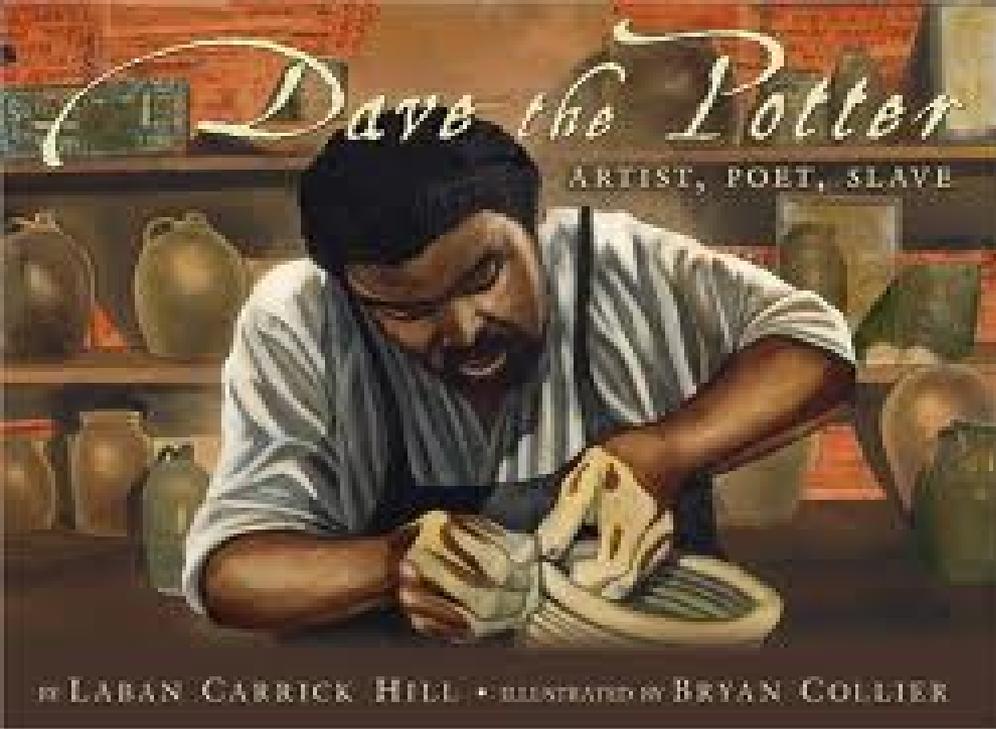
Dave the Potter + Clay Work

Hungry Caterpillar + Balloon Art

Chicken Sunday + Hats

When Sophie Gets Angry + Calm Down Jars or Anger Art

Tom Sawyer + Fence Board Art





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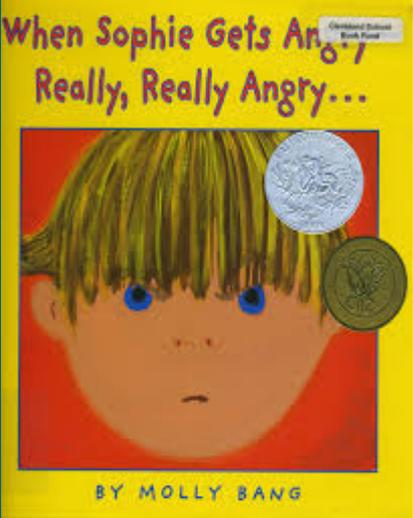


YES!

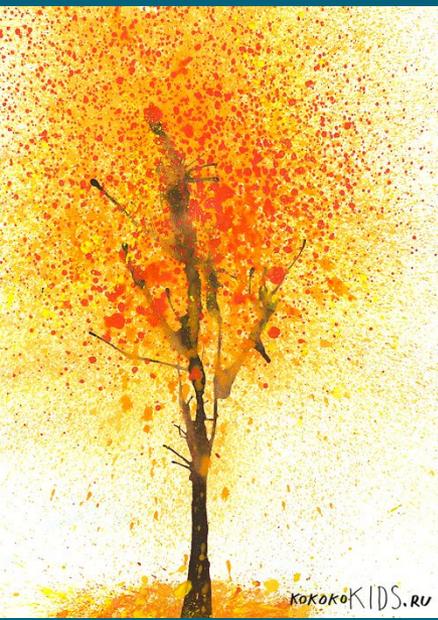
# Chicken Sunday

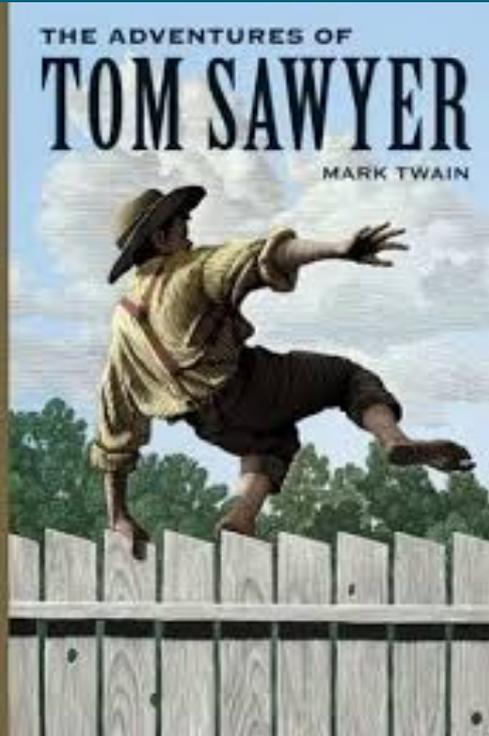
Patricia Polacco





Calm Down Jars \* Anger Release Art\*  
Angry Breath Art \* Abstract Anger \*  
Metaphor Art \* Volcano Making \*  
Anger Release Games \* Yoga Circle





Profile of a Great Library Arts Space:  
Crete Library Art Studio



## Crete library offers youth art exploration

October 14, 2013 12:00 am • [For The Times](#)

CRETE | The Crete Public Library's Art Studio explores different art mediums and lets participants make unique works of art to take home.

Recently the group's project was to paint patterns on small tree branches and a second project was painting patterns on canvas.

Each participant chose his tree branch, colors and patterns to make an exclusive art piece to take home. The canvas paintings will be completed this month and displayed on the second floor for the community to view.



## **Process oriented art projects @ Lisle Library**

The Youth Services Department at Lisle Library District (in Lisle, IL) focuses on process oriented art in our programs. It's about the process, not the product! Great art projects for toddlers and preschoolers.

<http://www.pinterest.com/lislelibrary/process-oriented-art-projects-lisle-library/>

# Excellent Internet Resources for Art Inspiration:

Pinterest: Search Process Art

Teacher Tom

Red Ted Art

Play at Home Mom

Magic Onions

Artful Parent

Tinkerlab

Make Zine and the Makers Movement

Child's Play Music

Bev Bos

Ooey Gooley

Explorations Early Learning

Reggio Children Inspired Facebook Page

Let the Children Play Facebook Page

Rebecca and Andrew Facebook Page

# Sources for Supplies

- Discount School Supply: Enter the word museum in discount code line for 15% off
- Nasco Educational Supplies
- RAFT: Resource Area for Teaching
- Explorations Early Learning
- KODO Kids: Overpriced good ideas
- Ebay

## Contact Information:

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