

## The Challenge of the 21<sup>st</sup> Century: Nurturing Young Children to be Creative Communicators, Collaborators, and Critical Thinkers

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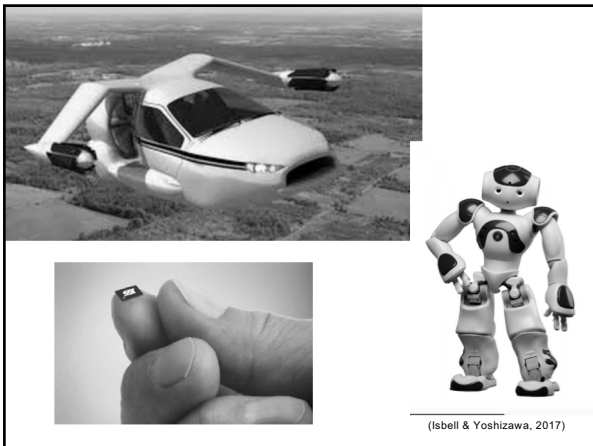
Communicators,  
Collaborators,  
Creators,  
and Critical Thinkers

### Challenges in the 21<sup>st</sup> Century

The children in our classroom will live in a very different world than today.

### Some Reasons

- Expanding amount of new information.
- Adapting to the changing environment.
- Increased understanding of brain development.
- New challenges that have never dealt with before.



**Researchers predict** that in about 12 years' time there will be **200** new professions we have not heard of.

(Business Day, 13/09/2018)

## The Future of Jobs

- . Robot Counselor
- . Air Traffic Controller for Vehicles
- . 3D Organ/Body Part Creator
- . Trash Engineer
- . Memory Creator

(World Economic Forum, Sept. 2018)

## Bureau of Labor Statistics

- . Job growth will be in services.
- . Second largest job generator will be educational services after health care.
- . Teachers, trainers, and mentors prepare citizens for flexible, fulfilling, and productive jobs.

(Anne Morison, Time Inc.)

Why is  
creativity  
important in  
today's  
world?

### Why is Creativity Important for Today's Children?

- . Use varied ways to communicate
- . Collaborate with diverse people on complex ideas
- . Develop creative confidence to deal with issues
- . Accept and take risks to make innovations
- . Adapt to new ideas using flexible thinking



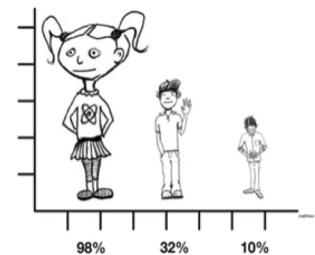
### Torrance: A Pioneer in the Study of Creativity

- . Studied young children in his research
- . Identified that 4-year old children were the most creative
- . Developed Torrance Test of Creativity



Dr. E. Paul Torrance

(Fox & Schirmacher, 2015; Torrance, 1965)



## Torrance's 4 Elements of Creativity

Fluency: Generating many possibilities

Flexibility: Making adjustments and adapting from one idea to another

Originality: Forming new and unique possibilities

Elaboration: Improving and extending original ideas and concepts



(Fox & Schirmacher, 2015; Torrance, 1965)

*At a Time When Creativity  
is Most Needed, We are  
Seeing a Decline*

## WHY? WHY? WHY?

- Focus on test-taking
- Increased requirements and standards
- Divergent ideas not valued
- Less time for the arts: visual arts, music, and movement
- Less opportunity for play
- Increased stress and anxiety

## Research

- Torrance Creativity Test: Scores have decreased (1998 –2008)
- Children are less expressive, less talkative, and less imaginative.
- The most significant decrease was found in the Kindergarteners (5 – 6 years old),
- Young children generate fewer and unique ideas.

(Kim, 2017)

“We are preparing people to work in factories--NOT thinkers or problem-solvers.”

“I believe that creativity should now be a priority for education in the world.”

(Robinson, 2011)

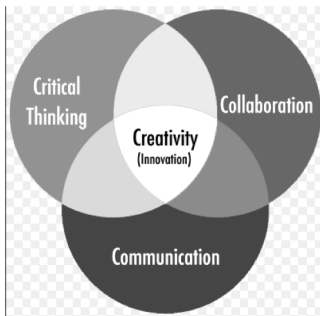


Sir Ken Robinson

## Recognizing the Need for Creative Communicators and Thinkers

- Finland
- China
- Singapore
- Italy
- Growing Number of Countries

## The Essential 4C's in the United States



- Creativity
- Communication
- Collaboration
- Critical Thinking (Problem Solving)

(Trilling & Fadel (2009))

## Confidence

- . Willingness to try
- . Persistence

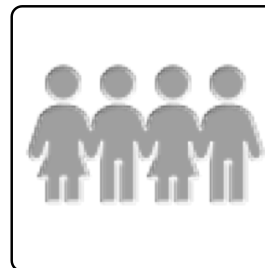
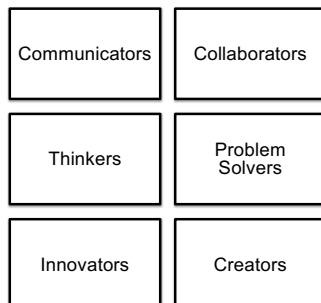
Golinkoff, R. M., & Hirsh-Pasek, K. (2016).

Who has the potential to be creative thinkers?

Young Children!



## In the 21<sup>st</sup> century, WE NEED:



Understanding the Characteristics of creative Children



## CHARACTERISTICS:

Uninhibited

Filled with  
Ideas

Confident in  
their Abilities

Want to Do it  
Their Way

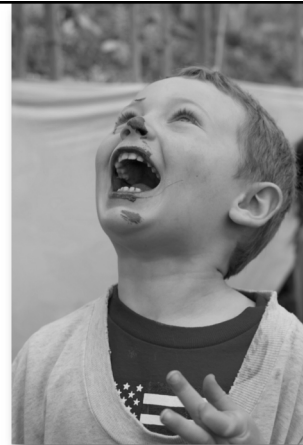
Unconcerned  
about What  
Others Think

## Our Challenge:

To support and nurture  
children being creative

Creative Thinkers need  
Time to PLAY with:

- . Ideas
- . Materials
- . Peers
- . Possibilities



## Communicators

Kim: "I  
can  
make the  
water go  
up!"





### Inventive Language

Angie: "Did you ever notice that our legs also need clothes?"

Nayla: "I like your pink one!"

Angie: "It's called *leg-scarf!*"

### Playful

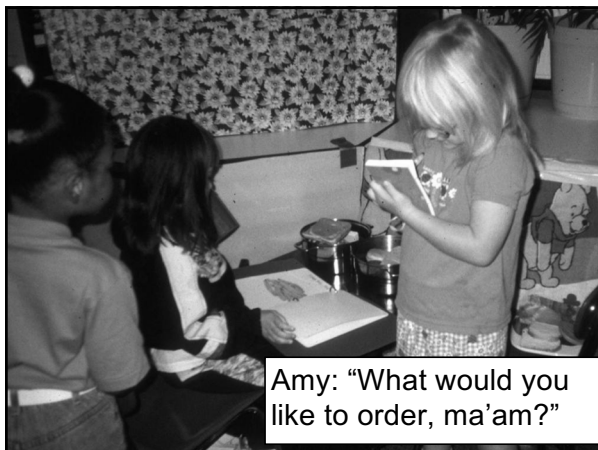


Ryan: "I made a **Jupiter-yarn!**"  
(giggles)

### Collaborators



Attempt to construct something unique



Amy: "What would you like to order, ma'am?"



Ali spills sand on the floor. She decides to sweep the floor on her own (independent responsibility).

Soon after, Ali's friends join in, and they decide to sweep as well (collaboration).



## Creative Thinkers

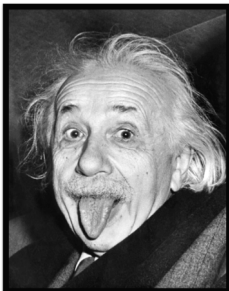
**“My brain is full of ideas!!!”**



**Creative Teacher  
=  
Creative Children**

(Isenberg & Jalongo, 2014)

**Cultural  
Creativity C**



**Personal  
Creativity c**



## Questions for You!

- Do you ever forget the words to a song and you had to quickly invent a new lyric?
- When you are preparing for dinner, you notice that a major ingredient is missing. What do you do?

**YOU ARE CREATIVE!**

### Characteristics of a Creative Teacher

- Playful with children
- Have a sense of humor
- Flexible
- Willing to take risks and try new things
- Enjoys working with creative children
- Appreciates that messy leads to order
- Understands the importance of continuing to grow

(Isbell & Yoshizawa, 2017)

**NURTURING  
COMMUNICATORS,  
COLLABORATORS,  
CREATORS AND  
PROBLEM  
SOLVERS**

**Creative Process  
or  
Product?**

### Benefits of Small Groups

- More opportunities to communicate with others
- Experiencing collaboration with different people and diverse ideas
- Participating in solving problems
- Experimenting with different ideas
- Choosing and evaluating possibilities



### Questions: Provocation

- Wait Time
- “Wh-” Questions
- Interactive
- Convergent or Divergent?
- Posing Questions Before and Return to Later
- Brainstorming Possibilities
- Reflecting and Revisiting

(Isbell & Yoshizawa, 2017)

## Supporting Children's Ideas



## Providing Choices:

- Children decide what they will work on
- Determine which materials they will use
- Group or individual decides which projects to do, book to read, songs to sing, or find a way to solve problems
- Self-evaluation/Independent thinking

## Which Center Will You Work In Today?



## Open-ended Materials: Many Possibilities and Combinations



## Valuing Creative Moments

## Communicating and Collaborating with Children about their Ideas





Kim: "I made a video camera and a remote!"



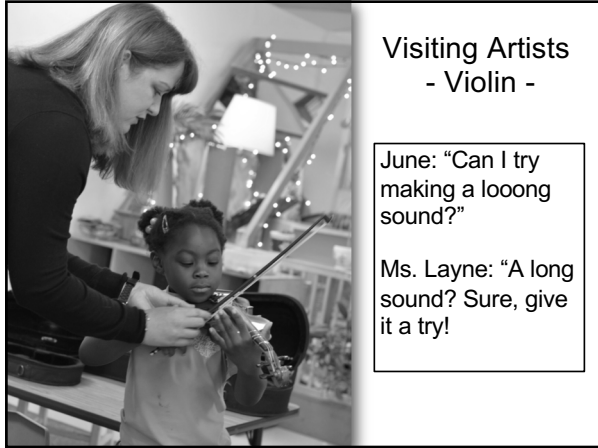
Offering Opportunities for Children to Communicate their Unique Ideas



Valuing Creative Efforts



Projects: Following Children's Interest

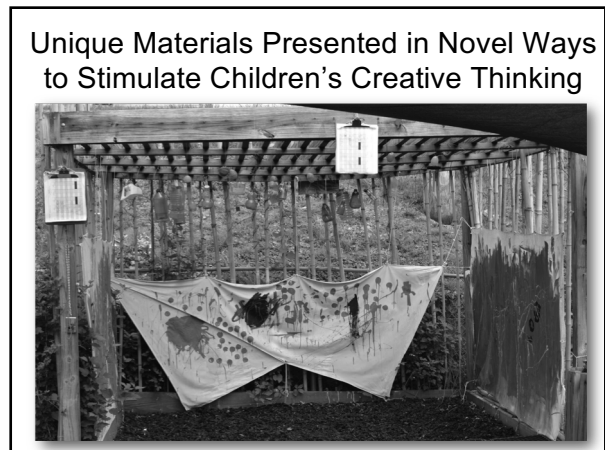
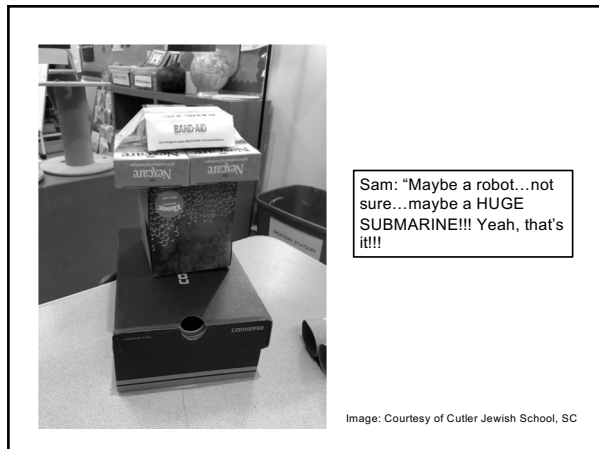


Visiting Artists  
- Violin -

June: "Can I try making a loong sound?"  
Ms. Layne: "A long sound? Sure, give it a try!"

Designing an Environment that Nurtures Creativity

- Provide safe and caring places
- Present variety of materials and novel items
  - Respect and encourage uniqueness
- Provide places to work and display creations
- Understand that mistakes are part of learning
  - Encourage self-evaluation



Chris:  
"Hey! This  
one sounds  
louder than  
the other  
one!"



### 3-Dimensional Construction Using Unique and Collected Materials



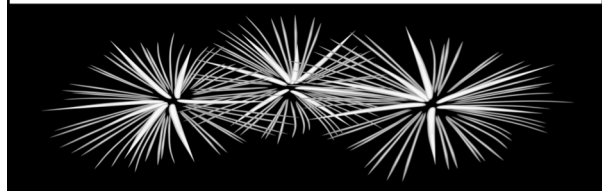
Tommy: "It's a big  
city with lots of tall  
and pointy  
buildings!!!"

### Space and Places to Work



# What is our challenge?

To **NURTURE** Young Creative  
Communicators, Collaborators,  
and Critical Thinkers!!!



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