Creativity

&

Creative Thinking

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What do you hear from your kids about creativity?
We don't get to be creative at school.
I’m super creative.
I don't have time to be creative.
I'm not creative.
The Myths
"I'M NOT CREATIVE."
"Creativity is genetic."
"Creativity can't be developed."
"Skills to foster creativity can’t be developed."
“Creativity is frivolous.”
“Creativity and achievement are mutually exclusive.”
"To be creative, you have to be an expert."
Creativity = art.
"Creativity fosters low level thinking."
"As intelligence rises, creativity drops."
What is creativity?
What is creative thinking?
Creativity

- Development of the new; generating original ideas, things, approaches, etc.
- Specific, unique talents in specific fields

Creative Thinking

- Cognitive skills/strategies to foster the development of new solutions, ideas, things, approaches, etc.
Traits of Creative People
Traits of Creative People

• Consider the traits included on the handout of traits of creative people.

• Do you agree that these are common traits of people who are creative?

• Think of these in terms of your child . . . do they fit?

• Are they helpful/unhelpful?
Is it only about character traits?
Measuring Creativity
It seems like it would be difficult to measure creativity.
• Torrance and Guilford
• Creativity researchers
• Developed tests to measure creativity
ASSESSING CREATIVITY

Think about the objects below. What could they be if you used your unlimited imagination? You may add to them, but you can’t take away from them. See them in any way you can. Be creative! Have fun with it!
Self-Actualization Test

Indicate the degree to which each statement applies to you, or the degree to which you agree with the statement. Use the following scale:

1 = No
2 = To a small degree
3 = Average
4 = More than average
5 = Definitely

1. I enjoy some ambiguity and "unknowns" in my life.
2. Most people are basically good.
3. I am a spontaneous and natural person.
4. I have a philosophy about life.
5. I accept myself; I like who I am.
6. I feel I have a mission in life—a vision about what I am and what I will achieve.
7. I am independent and self-sufficient.
8. I can concentrate very intensely on my work.
9. I am a democratic-minded person; that is, strongly unprejudiced.
10. I have a great zest for life.
11. I am creative.
12. I can appreciate again and again simple and commonplace experiences.
13. I handle stress well.
14. I have marvelous moments of intense enjoyment.
15. I have strong feelings of brotherhood with all people.
16. I am a kind, considerate, and charitable person.
17. I enjoy working toward a goal as much as the goal itself.
18. I define right and wrong according to my own standards more so than society’s conventions.
19. I am working to become what I am capable of becoming.
20. I feel I am high in self-actualization.

Scoring: Add up your ratings. The following is a guideline for interpretation:

20–40  Low Self-Actualization
41–53  Below Average
54–69  Average
70–83  Above Average
84–100 High Self-Actualization
Questions about creativity tests
• Questionable subjectivity in scoring
• Questionable reliability
• Questionable validity
What are the tests looking for?
Originality
New and unusual ideas
Fluency
Lots of ideas, possibilities
Flexibility
Building connections between divergent ideas
Elaboration
Enhancing ideas with details
Creative Thinking &

Creative Problem Solving
Skills, processes, and strategies that can be
LEARNED!
Creative Thinking Skills

- Inductive reasoning
- Deductive reasoning
- Fluency
- Flexibility
- Originality
- Elaboration
Mindsets, Behaviors, & Practices to Foster Creative Thinking

- Open mindedness
- Growth mindset
- Intuitiveness
- Play
- Imaginative
- Taking manageable risks
- Communication
- Always learning, being curious
- Open to potential, possibilities
- Reflective
- Work in passion areas
- Look for improvements, innovations
- Listen
- Identify inspirations, motivations
- Develop strategies to break down barriers to creative thinking
Barriers to Creative Thinking

- Assumptions
- Rules
- Fixed mindset
- Over-focused on logic
- Fear
  - Failure
  - Unknown
  - Success
- Personalized blocks
  - Family
  - Friends
  - Issues
Creative Problem Solving Strategies
Strategies that Foster Creative Thinking Skills

• SCAMPER
• What if? Questions
• Attribute Listing for Modifying
• Synectics Thinking
• CPS Model
• IDEAL Model
• Kipling Model
**The SCAMPER Method**

- **Substitute**: Remove a part of your product, service or process and substitute it with another.
- **Combine**: Combine ideas, processes or products into one more efficient option.
- **Adapt**: Keep an existing idea that might not have worked before to solve a problem.
- **Modify**: Modify an aspect of your situation or problem, for example by simplifying or modifying. Think of a solution if you're in a more insightful situation that adds value.
- **Put to another use**: Find current processes or products that serve a purpose to another use is possible.
- **Eliminate**: Eliminate or simplify a process or element to get to the point, but also to identify key important aspects.
- **Reverse**: Reverse the direction or direction of a process or operation, changing the sequence of steps or the order in which they are performed.

Sources:
- https://www.inloox.com/s/SCAMPER.png
- https://www.inloox.com/s/SCAMPER.png
- https://www.inloox.com/s/SCAMPER.png
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What if? Questions

• Generate what if questions
• Generate answers
• Consider if the what if happens —create ideas related to it.
Attribute Listing & Modifying

1. Identify Produce/Process
2. List Attributes
3. Select 7 Important Attributes
4. Define Desired Goals with Morphological Matrix
5. Create Combinations of Changed Attributes
6. Find Changes for Each Attribute
Synectics

"This is a technique that forces one to talk about the problem in another manner, to use other descriptive words in another form, mainly, by using analogies as the mechanisms for making the familiar strange and strange familiar."
Creative Problem Solving (CPS) Process

1. Fact Finding
   - Problem Definition
   - Preparation
   - Gather & Analyze Pertinent Data
   - Picking Out & Pointing Up Problem

2. Idea Finding
   - Idea Production
   - Thinking Up Ideas & Possible Leads
   - Select, Add & Reprocess Ideas

3. Solution Finding
   - Evaluation
   - Verifying Tentative Solutions
   - Deciding & Implementing Final Solution
   - Adoption

Prepared by Idea-Sandbox.com
Kipling Problem Solving Method

- WHO
- WHERE
- HOW
- WHEN
- WHY
- WHAT
- SOLUTION
Creativity in School
Fostering Creativity at Home
• Show examples to spark ideas.
• Encourage play, tinkering, dabbling.
• Provide a wide variety of materials.
• Embrace different approaches.
• Emphasize process, not product.
• Extend time for projects.
• Connect kids to mentors.
• Ask authentic questions.
• Share your experiences.
• Encourage reading for pleasure.
• Emphasize the arts.
• Embrace different points of view.
• Let children explore their interests.
Master the basics/foundational skills of your craft first.
Connect with others who practice the same skills/activity.
Seek out more information.
Persist!
• Show your creativity.
• Let your kids make mistakes and learn from them.
• Let kids dive into their own interests, independently.
• Embrace technology.

• Master the basics/foundational skills of your craft.
• Connect with others who practice the same skills.
• Seek out more information.
• Create unscheduled time.
• Encourage imaginative play.
• Get away from screens.
• Don't believe in the myths.
The Myths

- "Creativity is genetic."
- "Creativity is frivolous."
- "Skills to foster creativity can't be developed."
- "Creativity and achievement are mutually exclusive."
- "I'm not creative."
- "As intelligence rises, creativity drops."
- "To be creative, you have to be an expert."

Creativity - art.
The Challenge for YOU
• Look for ways to foster creativity, creative thinking, creative problem solving, etc., within your family
• Make it a habit
• That will be the first step to make an impact
Questions?