Child Development:

creativity in young children



Creativity is more than a product — it's a process. An interesting painting, a thought-provoking writing, a unique comment — these may be examples of creative work, but the decisions people make as they paint, sculpt, write, speak, play, and think are at the core of the creative process.

Art and music are common examples of creativity, but creative thought appears in almost all aspects of life — from the way a parent quiets a crying child to the methods a scientist uses to discover a cure for a disease.

This publication seeks to broaden understanding about the creative process for parents and others who work with children and youth.

Creativity in Young Children

Children who amaze their teachers with unusual responses to questions or display a keen sense of humor are thinking creatively. Even children who perhaps are nonconforming and unpredictable are thinking creatively.

Because creative thought often goes against the set rules of a strict classroom or home, adults may be irritated by the behavior of a creative child. Adults often do not recognize the value creative children bring to families and classrooms. All children become adults who will make a difference in our world with their creative problem-solving skills.

Encouraging Creativity

Teachers and parents can help children learn to think and solve problems in creative ways by giving them the freedom to make mistakes and by respecting their ideas. This happens with greater mobility and use of language through modeling and being allowed to experiment without fearing failure.

To solve a problem creatively, children need to be able to see a variety of perspectives and to generate several solutions. When working on a problem, adults should teach young children to examine their surroundings for "cues" that will help them generate a pool of possible solutions. In addition, adults can encourage creative thought simply by providing

- Choices Children who are given choices show more creativity than do children who have all choices made for them
- Stimulation Physical environments designed to stimulate the senses can enhance creative problem solving. For example, when shown an object in the

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shape of a half-moon and asked, "What can we use this for?" children will exhaust their first mental images and begin developing ideas from what they see in their surroundings. Research has found that children who keep looking around a classroom or playroom for cues are using a creative problem-solving method. An environment that provides both novelty and variety will greatly aid creativity.

 Time for play and fantasy — Dramatic play just before engaging in problem-solving tasks can lead to more creative thought.

Leave Reality Behind

The joining together of two or more irrelevant elements, called synectics, can lead to creative answers. The process of synectics can take many forms:

- Independence (with reasonable limits) Parents and teachers should encourage children to think and act without adult direction but within the limits of rules.
- Exposure to a diverse community Give children the opportunity to see and experience other cultures and ways of living, acting, and being to teach them how to respect the choices of other people.
- Brainstorming sessions Encourage children to tackle problems as a group by freely expressing their ideas with no fear of a negative response. Brainstorming can take place between a child and an adult or between two or more children.

Try these brainstorming activities

Hand a child a piece of modeling clay and ask the child to imagine that he or she *is* the modeling clay.

Place a child in a different time and place. For instance, ask a child to describe how he or she would cook a meal without electricity, silverware, dishes, etc.

Ask a child to describe a problem or an event using pictures instead of words.

Ask a child to solve a problem using the most unusual solutions he or she can come up with.

- Encouragement When children show special aptitudes, such as an ability to generate many questions, a keen memory, advanced reading or pre-reading skills, artistic skills, or other above-average abilities, adults should encourage them to build on and expand their skills.
- Honest critiques Evaluate students' work constructively so they can see ways to improve their work and still feel positive about themselves and what they have created.
- An environment where there is no one right answer for every problem — Teachers who enthusiastically encourage children to develop more than one solution to a problem see greater creativity in problem solving.

Barriers to Creativity

Often people are not able to perform at their best because of outside influences that make them feel pressured or insecure:

- Reward When people do not expect a reward, they
 are more creative and enjoy the process more. An
 unexpected reward that comes after a project is completed is valuable but not necessary to the creative
 process.
- Intrinsic versus extrinsic motivation As in the case of reward, external motivation (such as money or special privileges) undermines creativity. Artists say that when they are working for the enjoyment of the process, they are far more effective and productive than when they are commissioned to create for money.
- Expected external evaluation Knowing beforehand that a piece of art is going to be graded can lead to a decrease in creativity.
- Peer pressure There is some evidence that pressure to conform can lead to temporary decreases in creativity.
- Surveillance Being observed by others while engaged in a creative process can undermine creativity.

Creativity Through Art

Art is only one way children can express themselves but because it develops before writing, or abstract thinking, adults can see creativity expressed in art more easily with young children.

The following is a brief overview of the developmental stages of children's art. Please keep in mind that the ages given are general guidelines and that children will enter and leave each stage at their own pace.

Scribbling stage (approximately 2 to 4 years)

In this stage, children

Are amazed at their ability to make marks.

Spend much time practicing motor skills.

Draw circles first, then squares and other geometric shapes.

Begin trying to create (draw) their world. May want to point to and name parts of their drawings.

Pre-schematic stage (late preschool to approximately age 7)

At this stage, children

Make first attempts to represent people or objects. Efforts are recognizable to adults.

Are fascinated with the wide variety of colors.

Achieve obvious connections between different parts of a drawing.

Value signs of approval from teachers and peers.

Are easily discouraged and fatigued.

Are active, hands on, eager to learn, and self-centered.

Are highly imaginative yet tend to focus on one idea at a time.

Search for ways to represent their ideas.

Schematic stage (approximately 7 to 9 years)

Children at this stage

Increase the use of symbols, such as a heart for love or dark colors to represent night.

Are less self-centered.

Still do not have a realistic understanding of their environment. For example, the sky in a child's picture may not meet the ground at the horizon.

Show improved eye-hand coordination and fine motor skills. Have an increased attention span.

Begin developing a sense of humor.

Divide by gender in play.

Represent special characteristics for each person or object in their drawings. For example, if Mom wears glasses and has curly hair, the child will include these characteristics in the drawing.

Realistic stage (9 to 12 years)

Children at this stage

Are greatly affected by peer influence.

Increase the amount of detail and use of symbols in drawings.

Have expanded individual differences.

Begin to develop a set of values.

Want to do things "right."

Pseudo-naturalistic stage (12-14 years)

At this stage, children

Are highly critical of the products they make.

Use a more adult-like mode of expression.

Experience a period of great individual differences physically, mentally, emotionally, and socially.

Have art class available only as an elective in school. For many children, this will be the last opportunity to have art instruction.

Experience a period of heightened self-consciousness.

Children in this age group often feel a need to conform to their peers, which can stifle their creativity.

Parent and Teacher Pointers

Children want their art to look like the object they are looking at. Failing in this attempt can be discouraging. Children need to be taught that art is not limited to copying what they see. Adults can show children other styles of art (such as impressionistic or cubist art) to help them see that the free expression of ideas and emotions is more important than creating a mirror image.

Never compare one child's work to another's or select one piece to be the "model" or "ideal." Children will go through these developmental stages in the same order, but the pace at which they enter and leave them will vary.

Tips for parents and teachers to help children think creatively

Avoid projects that can be completed in only one way (paint-by-numbers, kits to be assembled, for example).

Do not use art as indoor recess or as a reward for behaving well. Art activities should be well thought out and planned.

Make a wide variety of materials available to children.

Suggest options, but let children make the final decisions for art projects.

Ask children about their art while they are creating it, not just at the end. Ask children to tell you about the work (as opposed to guessing, possibly incorrectly, from an adult's point of view).

Praise the effort, use of color, and uniqueness rather than just the final product — the trip is more important than the destination.

Display art at a child's eye level.

Encourage individual expression.

Avoid the regimented use of materials and adult-directed projects. A classroom full of samples of individual creativeness (as opposed to 23 identical pieces hanging in a row) indicates that the teacher has given children choices and has focused on the process rather than the product.

Creative Materials

Clay

Clay and play dough offer opportunities for children to be creative and to release energy and stresses. Clay and play dough can be pulled, pushed, squeezed, and punched. Rolling pins, cookie cutters, and various containers will add to imaginative play with clay. (A recipe for play dough is listed under "Fun Textures," next page.)

Paint

Painting is creative play that can be calming for children. It allows them to plan and make decisions about color and form, and it provides them an opportunity to work on their own.

When planning painting activities for children, alter the painting position (floor, table, easel) and provide different paint textures, thicknesses, and colors. Let children try painting with straws, eye droppers, cotton balls, cotton swabs, sponges, feathers, string, pipe cleaners, styrofoam, and fruits and vegetables cut crosswise.

Add a bit of powdered soap to the paint to make cleanup easier.

Sand

Sand has a wonderful unstructured quality. As children mix, pour, sift, stir, measure and mold sand, they are using premath skills, socializing, and using their imaginations.

Working with sand can be relaxing, and it provides a smooth sensory experience.

Be sure to include digging tools, buckets, molds, trucks, cars, and figurines in the sand play area.

Add dry tempera paint to color the sand, and let children create sand paintings by gluing sand to paper or by layering the colored sand in clear containers.

Chalk and crayons

Using chalk to draw on large areas such as driveways and sidewalks is an activity that generations of children have enjoyed. Freedom to create on large blank surfaces is far more stimulating than giving children activity sheets and telling them to "stay in the lines."

To get different effects from crayons, cut a "v" shape in the side of a crayon or use textured surfaces under paper (screens, coins, pegboards).

You can also recycle old bits of crayon by melting them together (at 200°F) in a muffin tin. Let the melted crayon bits cool and then shape them into writing utensils.

Water

Water is one of the most exciting and yet soothing play items for young children. Let children experiment with water by trying to float objects of different weights, pouring and measuring, adding food coloring, adding bubbles, washing dolls and toys, and using paint brushes.

Fun Textures

Play Dough

Materials: 1 cup flour

1 cup water ½ cup salt

1 tablespoon cooking oil 2 teaspoons cream of tartar

Food coloring

Procedure: Mix flour, water, cooking oil, salt, and cream of tartar. Heat slowly on low and stir constantly while adding food coloring. Continue heating until the dough forms a ball. Remove from heat, let cool, then knead the ball. Store in an airtight container.

Goop (it seems to melt in your hands)

Materials: One box of cornstarch
Water (start with ½ cup)

Food coloring

Procedure: Combine all ingredients in a shallow pan. Add water until the mixture is firm in the pan yet runny when in your hand.

Glerch (glue and starch)

Materials: 1 cup liquid starch 1 cup white glue

Procedure: Pour the liquid starch in the bowl first. Add the white glue. When the glue starts to solidify, pour off the starch. Work the mixture with your hands. Add more starch if it feels too sticky.

References

Amabile, T. 1983. The Social Psychology of Creativity. New York, N.Y.: Springer-Verlag.

Burrows, D. and Wolf, B. 1983. "Creativity and the Dyslexic Child: A Classroom View." *Annals of Dyslexia*. 33:260-274.

Gehlbach, R. 1991. "Play, Piaget, and Creativity: The Promise of Design." *The Journal of Creative Behavior*. 25:137-144.

Lowenfeld, V. and Brittan, W. L. 1987. *Creative and Mental Growth.* 8th ed. New York, N.Y.: Macmillan.

Mattil, E. and Marzan, B. 1981. *Meaning in Children's Art*. Englewood Cliffs, N.J.: Prentice Hall, Inc.

Wachowiak, F. 1977. *Emphasis Art.* 3d ed. New York, N.Y.: Harper & Row.

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