

Take the Lead Lesson 7: Great Minds Think...Differently!

Grade level: 6-8

Learning objectives:

Participants will learn:

- the definition of creativity
- characteristics of and keys to creativity
- killer phrases that can prohibit creativity
- the technique of brainstorming
- to use creativity to develop a product name and commercial
- about inventors and their creative ideas

Codes for TEKS:

Language Arts Fine Arts Social Studies

Codes for 40 Developmental Assets:

Creative activities Planning and decision making Interpersonal skills

National Education Standards:

Language Arts Fine Arts Social Studies

Life Skills Model:

Problem solving Decision making Wise use of resources Social skills

Time required:

60 minutes

Equipment/materials:

Flip chart paper
Markers
Empty cereal boxes
Construction paper
Crayons, markers or colored pencils
ScotchTM tape

Handouts/Support Materials:

Creativity Quiz

"Creativity is a type of learning process where the teacher and pupil are located in the same individual."

- Arthur Koestler

"To exist is to change, to change is to mature, to mature is to go on creating oneself endlessly!"

Can you draw?

Allow young people to answer.

If you said "no," why do you think you can't draw?

Allow young people to answer.

Everyone can draw! But we all place limits on what we think is "good" when we visualize ourselves drawing.

How would a kindergarten student answer the question, "Can you draw?" Most would instantly say "YES!"

Why do younger people believe they can draw when you feel you can't?

Allow participants to answer.

Young children have not had as much experience with people telling them negative things about their drawing talents. Adults give them lots of positive reinforcement by saying "Wow, that is a beautiful picture!" Also, young children haven't developed the skills or preferences that help a person decide whether a drawing is "good" or not.

By the time we are teenagers, we may have been told by some adult that we did a poor job on an art project or that we could do better. As we grow older, we also begin to compare our work to that of our peers and we begin to see differences in our talents and other people's talents. This can lead to us believe we aren't good at drawing, or playing ball, or some other activity.

When we say that someone is creative, what do we mean by that?

Allow young people to answer.

Creativity means being able to express yourself in an original way—one that is all your own. It also means being imaginative.

You may have heard someone say, "Creative people are born that way." But that statement is not true! Each of us is creative on some level, and when we put our minds together, we become creative geniuses! You've heard the saying, "Two heads are better than one."

What are some characteristics of people who are creative?

Allow participants to answer.

Creative people are:

- **Sensitive.** They are very aware of what they see, hear and touch, and they are responsive to other people and to their feelings.
- **Open-minded and flexible.** They can adapt to new situations and see lots of possibilities. They are willing to find innovative relationships.
- **Spontaneous.** They come up with ideas on the spur of the moment and don't always have every detail mapped out for every project.
- **Determined and have perseverance.** They don't give up. They keep looking for the most creative solution to the problem.
- Playful. They have a sense of humor and the ability to experiment freely.
- **Productive.** They can generate ideas easily and follow through on those ideas. They allow the free flow of ideas.

Sometimes we say things without even realizing that we can damage someone else's self-esteem and creativity. We call these comments "killer phrases" because they kill ideas and creativity. Can you think of some "killer phrases" you have heard or said to someone else?

Allow young people to answer.

Here are a few examples of "killer phrases" that can stop the creative process.

- Don't waste time thinking.
- We've always done it that way.
- What will people say?
- We've done alright so far.
- That's stupid!
- What were you thinking?
- That will never work.
- No one wants to do it that way.

Have you ever heard this saying: "If you always do things the same old way, you are going to get what you already have." What that means is that being willing to try new ideas is part of being creative.

Can you think of other sayings like this one?

Allow participants to answer. If Internet access is available, have participants search for quotes on creativity and select their favorites to share with the group.

Let's discuss some keys to creativity.

- We do not have problems; we have opportunities that can change the way we think, live and act.
- Creativity is looking at the same opportunity as everyone else, but recognizing something different.
- Only he who attempts the ridiculous can achieve the impossible.

Sometimes it is all about attitude! Do we look at the glass as half full (an optimist) or half empty (a pessimist)? Creativity is all about thinking "outside the box" and looking at things in unique ways.

What is brainstorming? (Refer to the Brainstorming handout for more details.)

Allow participants to answer.

Brainstorming is one way to stimulate creativity. When a group of people "brainstorms," they all offer ideas without judging how good or bad the ideas are. Brainstorming is a good way to come up with the best solution for a problem.

Here are some strategies for brainstorming that we are going to be practicing in just a few minutes.

- The group chooses a facilitator to keep the group on task.
- A recorder is appointed to write down every idea presented by every group member.
- There is a time limit.

Activity 1: Creative Uses for...

The young people will practice brainstorming and focus on eliminating "killer phrases" so every person in the group feels comfortable expressing ideas

Instructions:

- 1. Divide the group into smaller groups of four to six people. Give each group flip chart paper and markers.
- 2. Instruct each group to elect a facilitator and a recorder. The facilitator is to keep the brainstorming session moving and allow all members of the group to participate. The recorder writes down all ideas expressed by group members.
- 3. Select one item from the list below and instruct the groups to come up with as many uses for that item as they can think of. All groups will work on the same item. Try to have an example of the item on hand. You may even want to give each group the item. Sometimes being able to handle the item will encourage creativity.
 - a cup
 - a button
 - a brick
 - a walnut
 - a pair of pantyhose
 - a paper plate
 - a piece of paper
 - a tree branch
 - a plastic egg
- 4. Allow groups only 3 to 5 minutes to brainstorm.

Now that every group has had time to generate a list of creative uses for ______, we are going to compile all of our lists into one master list.

Our first step is to gather all ideas from each group and eliminate duplicate answers. Each recorder will read five ideas from his or her list and I will write them on the new master list. If any of the other groups had any of those ideas, mark them off your list and keep only the ones that no one has mentioned yet. We will rotate to each group until all of the ideas have been shared from each group.

As you do this, make sure everyone can see the master list you are compiling.

The next step in brainstorming is to narrow down our list to a shorter list. We'll vote on each idea on our master list. You can vote to keep the idea because it is pretty creative or scratch it because it is not as creative. The majority wins. Our goal is to get our list down to five to ten ideas.

This should not be a time of discussion. Just have the young people vote and mark off the items that don't get a majority vote to keep.

Now that we've narrowed down our list to a few great ideas, we are going to vote again to come up with the best idea. This time you can vote for only one of the ideas on the list. If we end up with no idea getting the majority of votes (50 percent of the group plus one), then we will take the top three and have a run-off.

Conduct the voting and record the number of votes by each idea. If a runoff is required, repeat the voting process with the top three items.

We have a winner! The most creative use	of	(insert the item that
was used in the activity) is	_ (insert the most	creative idea).

When we evaluate creative brainstorming, there are several things we look for.

- the number of ideas generated in a brief time period
- how well we were able to look at things differently and go beyond the obvious ideas
- how original, unique or unusual the ideas are

With brainstorming, we have to remember to be non-judgmental. That means allowing everyone to share ideas without saying whether we think the ideas are good or bad. That is the hardest part of the process and it takes practice.

Activity 2: Cereal Creations

The Yea 4-H! Cereal Company has just created a new breakfast cereal made from formed wheat chunks that come in red, blue and yellow. Instead of targeting this cereal either to young people or adults, the company wants to market it to young people who are 13 to 19 years old. Your task is to think of ten possible names for this product and then choose one. After you have a name for the product, develop a commercial that will interest the target age group.

Extended activity: To add to the commercial, give each group an empty cereal box and craft materials to design it in a way that would be attractive to the target audience. If computers are available, they could design their cereal boxes on the computer.

Activity 3: Creativity Quiz

Give each participant a copy of the Creativity Quiz to complete. If Internet access is available, they can do Internet searches to help them find the answers.

Creativity Quiz answer key:

- 1. $b Scotch^{TM}$ tape
- 2. b phonograph
- 3. a George Washington Carver
- 4. b Albert Einstein
- 5. $c Amana^{TM}$ freezers
- 6. b Leonardo da Vinci
- 7. $a Velcro^{TM}$
- 8. c Albert Einstein
- 9. $c Post-It^{TM}$ notes
- 10. c Leonardo da Vinci

Creativity Quiz

Circle the answer you believe is the correct response to each question.

1.	What famous product was considered a failure and abandoned, but became a success when one of the engineers took some discarded samples home and found that his teenage daughters used the product for setting their hair?			
	a) styling gel	b) Scotch [™] tape	c) Post-It [™] notes	
2.	What item was invented when someone discovered an analogy between a toy funnel and the motions of a paper doll and sound vibrations?			
	a) the telephone	b) the phonograph	c) the telegraph	
3.	What famous inventor had a conversation with God in which he asked if he could learn the mysteries of the universe, only to be told "No"? He finally asked to learn all he could about one small object.			
	a) George Washington Carver	b) Marconi	c) Samuel Morse	
4.	Who solved a famous problem by imagining he was travelling on a beam of light?			
	a) Thomas Edison	b) Albert Einstein	c) Benjamin Franklin	
5.	George Foerstner went door-to-door selling wholesale food. But he wasn't knocking on doors primarily to sell food. He was there to take orders for this appliance (to be used once he had sold people a large quantity of food). What was it?			
	a) Osterizer blender	b) General Electric stove	c) Amana freezer	
6.	What famous inventor was standing by a well when he saw a stone hit the water at the same time a bell rang? Watching the circular ripples in the water while at the same time listening to the ringing of the bell, he realized that sound travels in waves.			
	a) Sir Isaac Newton	b) Leonardo da Vinci	c) Marconi	
7.	What famous invention was discovered after the inventor studied under a microscope the burrs in his dog's hair?			
	a) Velcro TM	b) the zipper	c) the sewing machine	
8.	What famous person said if he were told that a comet would hit the earth in 1 hour, totally destroying it, he would spend 55 minutes thinking about the question and 5 minutes solving it?			
	a) Stephen Hawking	b) Carl Sagan	c) Albert Einstein	
9.	For five years, Spencer Silver tried to sell 3M on the usefulness of this product. Finally, he showed it to Arthur Fry, who saw the possibilities. Once marketed, it caught the attention consumers all over the world.			
	a) Scotch [™] tape	b) overhead transparencies	c) Post-It [™] notes	
	What famous inventor threw a paint-filled sponge at the wall and looked to see what shapes he could find in the splatters of paint, then thought about connections between the image he saw and the problem he was working on?			
	a) Alexander Graham Bell	b) George Washington Carver	c) Leonardo da Vinci	