

Creative Thinking In The Classroom

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The creative teacher exhibits an understanding of basic creative principles in all his work. It begins with creative thinking and ends with creative action.

One proven creative approach to teaching is "accelerative learning." Begun in Europe and brought to North America in the early 1970's, it forces the teacher and student to use creative talent. A mastery understanding of the subject and a strong desire to share the importance and ease of learning are key elements in creative teaching.

Accelerative Learning Method

To best illustrate creativity and accelerative learning, I will use the accelerative learning method to discuss some of the principles of creative thinking. Some of the reasons for teaching in an accelerative learning and creative way are:

1. The students will retain the information for a longer time.
2. The information can be taught in less than half the time.
3. The students will find it easy to learn even the most difficult material.
4. It is fun for both teacher and student.

Accelerative learning is as easy as 1, 2, 3. You do a number of things to prepare the student to learn, such as: have the chairs in a circle, have posters on the wall illustrating key points to be covered in the lecture, physical exercise and mind-relaxing activities. These are just a few of the preparation exercises.

Accelerative learning is fostered in the United States by the Society for Accelerative Learning and Teaching (S.A.L.T.), located in Ames, Iowa. I have the honor of being immediate past president of the Society and have used the method in my classes since 1976. It involves a pretest, physical exercise, mind relaxation, a fantastically interesting dynamic lecture, (I hope), practice using what you learn, a review in a very relaxed state with music, and finally a self-graded post-test.

Pretest

Take out paper and pencil or pen and get ready for a pretest. You will have exactly one minute for this. Write down all the ideas you can think of to improve a mail box. Begin

now. At the end of one minute, count up the number of ideas you wrote down.

Physical Exercise

Begin by standing up and using your imagination. Look above you and see that there is money hanging just above you. You must stretch up and take it down. Stretch now and pick as much money as you can get. Next, half knee-bends. Arm circles, and finally, up and down on your toes and with your hands over your head.

Mind Relaxation

In a moment, I'm going to ask you to sit down. When you do this, sit with good posture: both feet flat on the floor and your body in an erect position.

After relaxing the body, next you relax the mind. Normally we can only be attentive for a few seconds. When relaxed, the attention span increases and we learn at a higher rate. You may want to let the eyes close; I usually do.

Picture in your imagination a large sponge ball resting on your big right toe. Wherever it touches, it relaxes. Right now, your right toe and foot are becoming very relaxed. The ball is moving around your foot and relaxing as it moves. The ball moves to your right leg, your calf, knee, upper leg, up and down your right side, relaxing as it goes. Your right leg and side are very relaxed now. The ball moves to your shoulders and now up and down your back. You are now experiencing a nice relaxing back rub. It relaxes your neck, your face and scalp and next moves to your right arm and hand, relaxing and taking all the tension away. It moves to your chest, your stomach, left arm and hand, up and down your left side, left leg, around your left calf, your left foot, and finally resting on your big left toe. You feel very good about yourself, very relaxed.

Think of a time and place where you were very excited about learning. Maybe the first time you were going to drive a car, bake a cake, or learn something you knew you would do very well with. You could hardly wait to get started. What colors were there? What textures could you see? What could you hear? What could you smell and feel? You knew you would do well and you remember how your tummy felt. Bring that excitement for learning to the room now and we'll begin.

Purpose of Education

Any kind of education has a number of key purposes: to help the students become independent, creative, and questioning human beings who will have the desire and intelligence to decide their own destiny. The word I like best is "creative."

Creativity is important. Albert Einstein pointed out that imagination is more important than knowledge. More impor-

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tant because he felt that knowledge is limited to all we now know and understand, while imagination embraces the entire world, and all there ever will be to know and understand. Napoleon was heard to say that imagination rules the world!

One simple technique which you can use to greatly increase your own and your students' ability to learn is illustrated by the learning or forgetting curve. It shows us that we normally forget about half of what we learn within 24 hours. After three weeks, we normally remember only about 15%. If there is an immediate review, we can personally stay at the 90% or above level of retention. If we include a review in our communication and lectures, we can keep our students at the 90%-plus level of retention.

You Are Creative

You are a creative person. You have enormous creative potential just waiting to be opened if you know the secret key to unlock your creative abilities. You can and you will see others here this morning double their idea power during this presentation. They will do it to the extent that they can follow the techniques and rules of creativity.

Keep Your Dream Machine Alive

When we are young, we are all very creative. We are full of wonder, questions and dreams. We need to keep the dream machine alive! We lose what we don't use. We need to exercise our creative imagination in order to keep it at peak performance.

Creativity – A Recombination

A definition that is useful in the understanding of the subject of creativity is: Creativity is the recombination of elements which already exist toward some useful purpose. Everything in this room has existed for hundreds or even thousands of years. It took someone with creative imagination to recombine the elements of soy beans and make them into plastic.

Creativity can also be defined as improvement. Any time you improve something, you are using creative imagination.

Habit

To be more creative, you need to understand habit. To illustrate the power of habit, intertwine your fingers as you did when you were in kindergarten or first grade. Move the fingers over one place so that the other thumb is on top. How does that feel? Most people find it feels strange and different. Take the hands apart and put them together again quickly. Did they go back the old way? That's the force of habit. Fold your arms across your chest. Now fold them the other way. Many people cannot do this!

The habit to focus on when trying to be more creative is the habit of judging ideas. As you were trying to come up with ways to improve a mail box, perhaps you thought of ideas that were too expensive and did not write them down. Next time, write *everything* down. Deferred judgment is the most important key to unlocking your creative imagination and therefore the most important habit to change. Like all habits, it is easy to suggest changing, but may be difficult to do.

It takes courage to be creative. Many people are stopped

by fear. Take the letters from the word "fear" and give the word new meaning: F stands for fantasized, the E stands for experience, the A stands for appearing, and the R stands for real. Fear now means a fantasized experience appearing real. Maybe this is why deCharadin suggested that our duty is to proceed as if the limits to our ability do not exist, because we are collaborators in creation.

Creative Techniques

Brainstorming

Most of us heard of brainstorming, but how many remember the rules? The brainstorming creative technique has four rules:

1. Defer judgment
2. Free wheeling
3. Quantity
4. Combine

Incubation

In addition to brainstorming, there are a number of other techniques that will increase creative behavior. The second technique is incubation. Most of us have experienced this technique. You have a problem and then go about doing something else. Suddenly the answer or idea comes into your mind.

It is important to carry two tools with you at all times to make the most of incubation: 1. An idea trap (something to write the idea down on) and 2. A magic wand (a pen or pencil.) Incubation is a very powerful technique and one that many highly creative people depend on. I've used it many times myself, but I can't always wait for an idea so I also use other techniques.

Forced Relationship

Forced relationship is a third technique which will easily double your idea power. With this, you simply force a relationship between the problem and everything you see. For example, I want to improve a mail box so I look around me. I see a light and write down: Install a signal light so that I'll know when the mail has come. I see an overhead projector and add it to the list so that I can leave messages for the mail carrier. I see a chair and put down "chair" so the mail carrier can rest, or put large packages on it. If you didn't like any of these ideas, what were you doing? You were judging!

Catalog Technique

Catalog technique is one often used when we are looking for ideas around Christmas time, but it can work any time of the year. Get your favorite catalog and look through it and ideas will come into your head. Write them down.

Edison Technique

The Edison technique was developed by Thomas Edison. It has only two steps: 1. Find out everything you can on the subject; 2. Try every idea that comes to mind. This may be why Edison said that inspiration was 99% perspiration and only 1% inspiration.

Check List

The check list is the final technique I'm going to suggest. I've seen check lists with hundreds of words on them. To simplify the process, I'm going to suggest a check list with just three words on it: 1. **Magnify**; make the mail box larger for all those big packages you will be receiving. 2. **Minify**; make a small compartment for post cards. 3. **Rearrange**; put a rural mail box on a tilt so that if any water gets into it, only the edge of the mail will get wet.

Test

Time for another test. List all the ideas you can think of to improve a library. After 2 minutes, count them up and compare them with your pretest score.

Failure

There is no such thing as failure, just results. It is trial and ... success. You keep on trying until you succeed. Somewhere we received the wrong idea about failure. It is a natural part of growth and development and an integral part of success.

All Ideas Are Good

This next concept is very important, and changed my life. I formerly felt like a fraud when a student brought me an idea that I reacted to in a negative way. Of course, I would say an encouraging word; but inside, I didn't feel right. Then I found out that all ideas are good because they have positive and negative aspects, just like a line.

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Before, I only looked at the negative. Now, even in meetings, I look for the good in each idea. I call this the "say two good things before you let them have it" technique.

Power of Imagery

The final creative idea is the power you have to visualize. Here is a simple way to test this power. Stand up! Now put your right index finger out in front of your face. Without moving your feet, twist to the right as far as you can. When you get as far as you can go, make an imaginary mark on the wall.

Sit down and we will practice this in our imagination. Rest

your hands in your lap. Close your eyes if you like. See yourself in your visual imagination with your finger in front of you turning to the right and passing your first mark. Now, see yourself coming to the center. Do it again, seeing yourself passing the first and the second mark. Do it again, making a new Canadian record by passing all three previous marks.

Open your eyes, stand up, put your finger in front of you and do it for real.

Did you beat your old mark? Most people do, and by quite a bit too! This works because our minds can't tell the difference between a real experience and one that is vividly and repeatedly imagined.

Passive Review

Now it is time for a passive review. I will review the key points of the lecture and in the background you will hear soft baroque music. This is the best kind of music for learning.

We've been using the S.A.L.T. accelerative learning method that is creative and easy as 1, 2, 3: Preliminary relaxation and positive suggestion, Dynamic and passive presentation of material, and practice doing what it is you are learning. The purpose of education is to help the students become independent, creative, and questioning human beings who will have the desire and intelligence to decide their own destiny. Einstein said that imagination is more important than knowledge. With review, we can keep our retention at the 90%-plus level of retention. You are a creative person and you can easily double your idea power if you can develop the habit of deferring judgment and use techniques such as brainstorming, incubation, forced relationship, catalog, Edison, and check list. Develop a welcome attitude toward failure because it is trial and success. All ideas are good because they have positive and negative aspects. Look at the positive. Use your imagination to see yourself succeeding in every aspect of your life.

Post-Test

Take two minutes to think up all the ideas you can to improve a bath tub or shower.

Let me close with an idea from Goethe: Whatever you can do or dream, you can begin it. Boldness has genius, power and magic in it. Begin it now!

You are a creative person – so are your students!