CREATIVE THINKING WITH BRAINGYM

Bonita Hirza
University of Muhammadiyah Palembang
Email address: bonitahirza@yahoo.com

Abstract

This study aims to explore how creative thinking skills can be improved by activating both hemispheres. Creative thinking is a process used when we bring a new idea. Creative thinking can also be interpreted as a combination of logical thinking and divergent thinking. One purpose of studying mathematics is to form a logical thought pattern, systematic, analytical, and creative. Actually, every student has the potential of creative but the education system tends to be oriented on the left brain function and provide less opportunity to develop in the right brain functions related to creativity, and divergent thinking. BrainGym supporting research has been done a lot of academic ability, BrainGym activity is very fun to do because it is basically a physical fitness exercise that specializes in maintaining brain fitness.

Keywords: Creative Thinking, BrainGym.

INTRODUCTION

Future challenges are always changing as well as increasing competition requires that educational outputs are not only skilled in one field but also creative in developing the occupied areas. It needs to be manifested in every subject in school, including math. Learning math is generally dominated by the introduction of formulas and concepts verbally, without enough attention to student. In addition, the learning process almost always takes place with the lecture method is mechanistic, the teacher becomes the center of all activities in the classroom. Students listen to, emulate or imitate exactly the same way that the teacher without the initiative. Students are not allowed or encouraged to optimize their potential, develop reasoning and creativity.

Learning is closely associated with the use of the brain as the center of mental activity ranging from extraction, processing, to the inference of information. Thus, learning is a process of synergy between brain, mind, and thought to produce optimal usability.

Santoso (2002) says that the education process in schools and in families, more oriented to the structure of linear thinking (vertical thinking) that is on the left brain, the education process in schools more oriented thinking with the steps that have been determined, step by step with the orientation on the end result that it has no other alternative.

Learning is not just limited to reading a book or heard an explanation that does not give an understanding, according to Putra (2008) involves learning to work as associative thinking, so that learning occurs in any connexion between the information with other information.

To optimize the learning outcomes, then the process of learning to use the whole brain. According DePotter (2002) when humans communicate with words, the brain at the same time to find, sort, formulate, tidy, organize, connect, and make a mixture of ideas with words that already have that meaning can be understood. At the same time these words sequential with images, symbols, images, sounds, and feelings. A set of words that are jumbled in the brain sequential not come out one by one are linked by logic.
Various studies have proved that certain movements can enhance the ability of the brain hemispheres to be balanced between the right and left hemisphere. Learning ability with both hemispheres can be arranged with various movements.

Based on the above, the study was conducted to explore how creative thinking skills can be improved by activating both hemispheres of the brain through the motions BrainGym.

DISCUSSION

1. CREATIVE THINKING

Ability to think creatively is one important thing that a person can have the creativity. Creative thinking is a mental activity to create relationships that continue, so it found a combination that has not been known previously and marked a new idea that emerged as a result of the thinking process. Creative thinking will bring positive impact on myself and my surroundings. Encourage self-actualization potential, while for others will give you the satisfaction of the action taken within a faster, gives more precise results, and is the work original and unique.

This understanding suggests that creative thinking is a mental activity to find a combination that has not been known previously. Creative thinking can also be viewed as a process used when an individual brings or bring a new idea. The new idea is a combination of previous ideas that have not been realized. This understanding is more focused on individual processes to bring new ideas which is a combination of previous ideas that have not been realized or are still in the thinking. Understanding of creative thinking is characterized by new ideas that emerged as a result of the thinking process.

Develop the ability to think creatively is very important in learning mathematics, such as those written by Munandar (in Parwati, 2005) creativity as the ability to see the various possibilities of settlement of a problem. One's creative ability is very dependent on factors within and outside ourselves, therefore, one's creative abilities should be developed.

Based on those opinions, then creative thinking can be interpreted as a mental activity that a person uses to construct the idea of a new idea.

To know the person's demonstrated ability to think creatively through the product of thought or creativity to produce something "new". Munandar (2004) showed indications of creative thinking in his definition that "creativity is the ability to find many possible answers to a problem where the emphasis is on quantity, efficiency, and diversity of answers". This understanding suggests that the ability to think creatively someone getting high, if he is able to show many possible answers to a problem. All answers must be in accordance with the problem and correct. Besides the answer should vary.

Krutetskii (1976) cites the idea of Shaw and Simon give an indication of creative thinking, namely (1) the product of mental activity has the characteristics of novelty and value both subjective and objective, (2) thought process is also new, which requires a transformation of ideas that are received before or refusal, (3) the thought process characterized by the presence of strong motivation and stability observed in the period of time or with high intensity. This opinion suggests that the ability to think creatively in terms of products based on the novelty and value of these products. Also in terms of the transformation process indicated by the novelty of ideas and a strong motivation.

Haylock (1997) says that creative thinking is considered almost always involve flexibility. Krutetskii (1976) identified that the flexibility of mental processes as a key component of creative mathematical ability in students.
Guilford regard creativity as a creative individual. He defines creativity as a Fluency, flexibility, and Originality. Mednick regard creativity as a creative process, and Stein looked at creativity as a creative product that is acceptable, useful, and satisfying. Through these three definitions, Lefrançois (1991) summarized it into a creative individual, creative product, and the creative process.

Talk about creativity always comes down to the question, "How to be creative?" The statement quoted Stenberg Woolfolk (1993) states that knowledge has contributed to developing the creative potential, but knowledge is not the only component of creativity. courage externalizing knowledge into a creative person. Children become creative if he has the courage to be different; courage to be wrong; the courage to free the mind.

Teresa Amabile (in Juwanda, 2006) in theory enriching their creativity with the creativity component of task motivation. According to Amabile, motivation is very important in developing creativity. In his research shows, individuals who have demonstrated their creativity more intrinsic motivation than individuals who lack motivation or motivated from the outside.

Based on the description of the experts on creativity, it appears that the potential of one's creativity can not develop by itself without supporting components. Supporting components are referred to as a component of creativity is the knowledge, courage, and motivation.

2. BRAINGYM

The brain is a tool to process data on internal and external environment of the body are received receptor on sensory organs. The data is transmitted by the nerves, known as the nervous system as a whole. Nervous system allows the entire fibril changing stimuli in the form of electrical impulses to capture information (Cohen, 2007).

We know that exercise to fill the brain with oxygen and can trigger the release of neurotrofin that can promote growth, influence mood, memory store, and improve connections between neurons (Jensen, 2007). Gage (1999) says that regular exercise can stimulate growth of new brain cells and prolong the durability of cells that remain.

The learning process must be able to optimize the work and functions of the brain. Talent, intelligence, and creativity is determined by the structure of the brain. As the central intelligence of the human brain has two hemispheres, the left hemisphere and right hemisphere. Left hemisphere functions mainly to rational thinking, analytical, sequential, linear, scientific. The right hemisphere functions to think holistic, spatial, metaphoric. The right brain is also dealing with the problem of abstract ideas full of imagination that require creativity, originality, creativity, and artistic talent.

At first glance, the human brain looks very symmetrical. Two cerebral hemispheres (cerebral hemispheres) brain with each other as in a mirror image form. With closer inspection, turns out large parts of the brain is not the same in both structure and function.

Along with the growth of the body, the cooperation between the two sides of the opposite happening through movements such as crawling, walking, and running, in the form of a cross motion. Cross movement activates a speech and language centers in the brain, thereby effectively to increase the ability of the brain.

Dennison (in Cohen, 2007) found that the effective cross-motion to increase the ability of the brain, because the cross movement stimulates the brain hemisphere that receives the information and express it thus simplifying the process of learning are connected.
Ability to learn the entire hemisphere of the brain can be regulated by various movements, such as:

1. **Cross**
   This movement activates the relationship between right hemisphere and left hemisphere. Do this movement every day.

2. **Round Neck**
   Round neck makes neck relax and release tension caused by the inability to cross the midline visual. If the movement is done before reading and writing, will boost the capability of vision with both eyes and hearing with both ears simultaneously.

3. **Hips**
   This movement can loosen the lower back and stimulates the nerves in the hip is weakened due to prolonged sitting.

4. **Lying Cross**
   This movement strengthens the stomach, relaxes the lower back, and activate the left hemisphere and right hemisphere.

5. **Holding Shoulder**
   This movement can release the neck and shoulder tension arising due to stress.

6. **Lifting Hands**
   This movement can lengthen the muscles of the upper chest and shoulders to control the movements of gross motor and fine. If the muscle is shortened because of the tension, the body movements associated with the write is inhibited.

7. **Opening the Mouth**
   Opened his mouth like a yawn to increase air circulation to the brain and stimulates the entire body.

8. **Holding Ears**
   This movement can stimulate the concentration of attention to the hearing. Also can reduce the strain on the bones of the head.

9. **Tread holds Legs crossed**
   This movement can stimulate the nerves of the brain related to mathematics and the ability to think creatively.

10. **Interesting Breath**
    This movement can increase air circulation to the forebrain associated with the ability to understand and think rationally.

**CONCLUSION**

Based on the above description, it can be concluded that the routine BrainGym in the classroom can provide great results for student creativity.

**BIBLIOGRAPHY**


