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“Brain Based Learning: An Innovative Strategy for Effective Learning”

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ABSTRACT:

Brain is social, it develops better in concert with other brain. Complex learning is enhanced by challenges and inhibited by stress. Every brain is uniquely organized Brain Based Learning refers to teaching methods ,lesson designs and school program about how student learns, grow older and mature socially, emotionally an cognitively. Brain works best in more colorful classrooms which incorporate music, movement and novelty of tasks.

KEYWORDS: Brain Based learning, Brain Strategies, Relaxed alertness

INTRODUCTION

In research, neuroscience suggests our brain learns naturally. Brain is social it develops better in concert with other Brains. Complex learning is enhanced by challenges and inhibited by stress. Every brain is uniquely organized . All learning is Brain based learning. Brain based learning is a new perspective in teaching and learning that is based on using technology and knowledge of the brain and its function in order to get most out of the education process.

Brain based learning has been called a combination of brain science and common sense. Brain based learning refers to teaching methods, lesson designs, and school programs that are based on the latest scientific research about how the brain learns including factors such as cognitive development how students learn differently as they grow older and mature socially ,emotionally and cognitively. Today student are demanding a

change in the classroom because of their ability to gather information faster than any other generation. With some foundational knowledge about the physiology of the human brain, supported by neurocognitive principles of how brain learns and cognitive translations of what those brain friendly strategies look in the classrooms, teachers are armed with an astonishing arsenal of tools for reaching and teaching all children. It has been observed that teaching methods and resources used by a teacher can contribute significant to learning.

Patterning is thinking, when it comes to learning, our brain's core belief system is comprised of everything that's already known to be true. Our brain is ultimate pattern-making machine. It is continually engaged in two primary functions-seeking out patterns and creating new ones. With each new pattern connection that is made, our thinking network continues to grow and more connections made, the easier it will be to identify new ones. Acquiring knowledge in this way is both easy and effortless, with no memorization or repetitious practice required.

In cognitive psychology, chunking is a process by which small individual pieces of a set of information are bound together to create a meaning whole later on in memory.

The chunks, by which the information is grouped, are meant to improve short term retention of the material and allowing the working memory to be more efficient. A chunk is collection of basic units that are strongly associated with one another, and have been grouped together and stored in person's memory. These chunks can be retrieved easily due to their coherent grouping.

It is believed that individuals create higher order cognitive representations of the items within chunk. The items are more easily remembered as a group than as the individual items themselves.

Learning will be much more effective and efficient when the learner is relaxed. The brain cells give much priority to emotional memory. An emotion is thought or idea accompanied by bodily sensation. It is experienced as a force of energy. There are no bad emotions only desirable and undesirable ones. Emotions are unique to humans. These emotions are messenger of valuable information.

Brain based learning is combination of different concepts such as cooperative learning, experimental learning, multiple intelligence, mastery learning, learning styles, right brain theory, peer tutoring, left brain theory and triune theory of brain. These are well-suited for the existing methods of teaching in fields like natural sciences, languages and social sciences. This method applies in brain friendly and unthreatening classroom environment for maximum learning and also to minimize the conventional method which promotes only rote learning (Rehman, 2011).

Brain based learning draws upon the functioning of the brain and takes into consideration the rules of the brain for meaningful learning.

According to Caine and Caine (1991) developed some Brain Based Learning principles to optimize maximum learning;

The brain functions as a parallel processor.

Learning involves the entire body.

The need to find meaning is natural.

Patterning is used in the quest for meaning.

Emotions are important in patterning.

The brain processes both wholes and pieces at the same time.

Learning involves both concentrated attention and peripheral observation.

Learning is usually a combination of conscious and unconscious processes.

We have at least two forms of memory a spatial memory system and a collection of rote learning systems.

We comprehend and retain information best when it is presented to us in a clear and concise manner.

Threat inhibits learning whereas challenge promotes it.

Each brain is distinct.

The three instructional techniques associated with the brain based learning are:

1 Orchestrated Immersion

Orchestrated Immersion is creating learning environments that fully immerse students in educational experiences .This implies an environment where student feels like he /she is the part of process and living in it.

2 Relaxed alertness

This involves trying to eliminate fear in learners while maintaining a highly challenging environment. This should be highly related to subject matter and meaningful .Such challenges stimulates students mind to the desired state of alertness.

3 Active processing

Active processing is concerned with allowing the learner to consolidate , internalize , relate and

analyze situations in no of ways in order to gain knowledge and information.

Effective instructional and learning strategies can be used across grade level and subject areas and can accommodate a range of student differences. An educational specialist, Lisa Kirby, identified 20 strategies for effective Brain-compatible learning/teaching. They are as follows:

1. Use of humor in teaching

2. Use of Stories in teaching
3. Conducting Brain Storming sessions
4. Allowing Movement of the students
5. Using Drawing and art in teaching
6. Use of Music in teaching and learning
7. Use of Graphic Organizers
8. Use of Visuals to teach
9. Encouraging visualization and Guided Imagery
10. Manipulating student interest
11. Use of Metaphors
12. Use of Mnemonic Devices
13. Engaging the students in Games
14. Use of Technology
15. Use of Role Play
16. Encouraging Learning through Cooperation
17. Application of Project Based Learning
18. Use of Journals
19. Encouraging Work and Study
20. Planning Field Trips.

Role of teachers in implementing Brain based learning

Teachers not only focus on structure of learning ,but how to set up a classroom, support social emotional learning and assess students .Brains work best in more colorful classrooms ,which incorporate music ,movement and novelty of tasks .when teachers provide fruitful atmosphere to students ,they feel safe and learn new skills and knowledge without fear. Healthy habits and nutrition are essential for brain .when students build strong relationship with classmate they learn effectively .when teachers use multiple form of assessment in classroom, allow students to show their knowledge in authentic and meaningful ways can lead students great success and achieve goal. when repeated practice of some learning skills to students make them to achieve their pathways.

CONCLUSION

Today students are demanding for a change in classroom teaching .Brain Based Learning is comprehensive strategy which helps brain to learn properly in fruitful atmosphere. Brain learns more better if balance between stress and comfort, high challenge and low stress. Too much anxiety shuts down opportunities of learning and thinking of new ideas and skills. Brain Based Strategies helps students for meaningful

learning in the context of life related ,enriching experiences and providing students opportunities for progress in life.

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