

**USE OF MUSIC AND ARTS IN EDUCATION AND BRAIN BASED LEARNING**

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**SRJIS IMPACT FACTOR SJIF 2015: 5.401**

**Date of Issue Release: 04/03/2017,**

**Volume: SRJIS, Jan-Feb, 2017, 4/30**

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**ABSTRACT**

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*Brain-based learning include, Tie in facts and skills with real experiences to embed learning in a meaningful way. Incorporate learning with storytelling. Use speculations, experiments, question and answer sessions, hold debates, games, simulations, music, songs, and role playing to embed information into the student's long-term memory. Tie in information with the students' previous experience or make it relevant in their life in order to enhance the brain's transfer of knowledge into long-term spatial memory. Music, Art and Drama when used in teaching-learning process, it enhances the learning, achievement of various subjects. It can develop various skills in the students. Only traditional teaching using those traditional methods are now not used in various schools. As new techniques are incorporated in new syllabus of teacher education, one of the most important point is that use of Music, Art and Drama in education. Music can do all sorts of things from relieving pain, to increase Childs IQ, to improving mathematics skills. Mathematics seems to be most closely connected to music. In the same manner Art, Drama can develop the aesthetic values as well as kinesthetic skills.*

**Keywords:** Music, Dance, Drama and Arts, Brain Based Learning



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**Introduction:**

The human brain is the most complex system on earth, yet it is too often used in schools primarily as a simple device for storage and retrieval of information. It is now known from the research of such neuroscientists as Marian Diamond at Berkeley, that the human brain can change structurally and functionally as a result of learning and experience for better or for worse. New neural connections that make it possible for us to learn and remember and problem-solve and create can continue to form throughout life, particularly when human beings are in environments that are positive, nurturing, stimulating and that encourage action and interaction. Such environments are opposite from dull, boring, rigid environments in which students are the passive recipients of information. Well designed arts programs provide just the kinds of environments that Diamond describes.

Not only can the brain be transformed, but it is itself a transformer. For example, one might take in the sight of a magnificent sunrise, and the experience might emerge in the form of a

lyric poem or a joyful dance. One might take in an exhibit of paintings, and the experience might emerge in the form of music, such as Moussorgsky's "Pictures at an Exhibition." One might take in the experiences of a lifetime, and they might emerge in the form of historical plays, tragedies, and comedies, such as those written by Shakespeare. The arts provide the means for the human brain to function at its highest capacities.

### **Brain based learning and music:**

Brain based learning means an interdisciplinary answer to the question of which is the most effective way of the brains learning mechanism. Brain based learning is defined as recognition of the brains codes for a meaningful learning and adjusting the teaching process in relation to these codes. Traditional schooling, however, often inhibits learning by discouraging, ignoring, or punishing the brain's natural learning processes.

The three instructional techniques associated with brain-based learning are Orchestrated immersion, Relaxed alertness, Active processing. According to research on brain-based learning, environment, diet, amount of sleep, and water intake all affect the way our brain responds and learns. This information can be used in the classroom to create vibrant learning environments. The teaching takes place in fear free atmosphere. Each and every student gets equal opportunity, nobody is underestimated.

Other suggestions to integrate brain-based teaching include, Tie in facts and skills with real experiences to embed learning in a meaningful way. Incorporate learning with storytelling. Use speculations, experiments, question and answer sessions, hold debates, games, simulations, music, songs, and role playing to embed information into the student's long-term memory. Tie in information with the students' previous experience or make it relevant in their life in order to enhance the brain's transfer of knowledge into long-term spatial memory. Music plays very important role as given below.

Music: - Music can do all sorts of things from reliving pain, to increase Childs IQ, to improving mathematics skills. Mathematics seems to be most closely connected to music.

### **Use of music in education:**

One of the key tenets of brain-based learning is that attention follows emotion, and both music and art often tap into the emotional areas and thus are natural conduits for remembering and connecting information.

Music: Music when used in teaching – learning process it can lower stress, boost learning when used in three different ways:

1. As a carrier - using melody or beat to encode content,
2. As arousal - to calm down or energize,
3. As a primer - to prepare specific pathways for learning content impacts the immune system, and is an energy source for the brain.

### **Music – TO understand the self**

“Music learning supports all learning. Not that Mozart makes you smarter, but it’s a very integrating, stimulating pastime or activity,” Guilmartin says.

### **Language Development**

“When you look at children ages two to nine, one of the breakthroughs in that area is music’s benefit for language development, which is so important at that stage,” says Luehrisen. While children come into the world ready to decode sounds and words, music education helps enhance those natural abilities. “Growing up in a musically rich environment is often advantageous for children’s language development,” she says. But Luehrisen adds that those inborn capacities need to be “reinforced, practiced, celebrated,” which can be done at home or in a more formal music education setting.

According to the Children’s Music Workshop, the effect of music education on language development can be seen in the brain. “Recent studies have clearly indicated that musical training physically develops the part of the left side of the brain known to be involved with processing language, and can actually wire the brain’s circuits in specific ways. Linking familiar songs to new information can also help imprint information on young minds,” the group claims.

This relationship between music and language development is also socially advantageous to young children. “The development of language over time tends to enhance parts of the brain that help process music,” says Dr. Kyle Pruett, clinical professor of child psychiatry at Yale School of Medicine and a practicing musician. “Language competence is at the root of social competence. Musical experience strengthens the capacity to be verbally competent.”

We are all by nature musical, rhythmical people. We listen to our mother's heartbeat for nine months before we are born and come into the world with our own rhythms of breathing and pulse. We are surrounded by music every day, enjoy it for relaxation, and may dance to it, yet many of us have not experienced music in our school lives beyond learning the alphabet through singing it. And many others have only experienced music in school during a weekly forty-five minute class period.

1. First-graders who were taught the rhythm and melodies of folk songs 40 minutes a day for seven months showed significantly higher reading scores than a control group.

Incredible achievement especially in reading skills observed in students. Many students increased their reading scores, due to music. Recently it was found that students who studied arts and music scored significantly higher than the national average on the Scholastic Aptitude Test. Students who had participated in acting, play production, music performance and appreciation, drama appreciation, and art history, scored an average of 31 to 50 points higher for the math and verbal sections.

Like many of the other arts, learning to play an instrument or compose music requires intense concentration and practice, discipline before freedom of expression can be meaningful, and the ability to persevere and see processes through from beginning to culmination in a performance or product. Making music together in an orchestra or choir exercises and develops collaborative skills that can be used throughout life. Music may be integrated throughout the curriculum in a variety of ways

1. Music is often played to create a welcoming environment as students enter a class and as soft background music to improve focus of attention during quiet study times or to stimulate creative thinking. Not only schools but corporate training programs have been using his methods with success.
2. Some Schools in Chicago uses music and rhythmical games to accelerate learning. Science and math concepts and other material to be memorized are frequently set and sung to music, with remarkable retention as a result.
3. A teacher of a high school survey of English literature plays music of each period currently being studied as students enter the room.
4. Dramatic music stimulates the writing of poetry or short stories in a creative writing class. The U.S. National Child Welfare Association states, "Through music, a child enters a world of beauty, expresses his/her inmost self, tastes the joy of creating, widens his/her sympathies, develops the mind, soothes and refines the spirit, and adds grace to the body."

#### **Use of arts in education:**

Art is an important part of brain-based learning in that it provides many learners with avenues of expression and emotional connection and release. It is important at many levels. For instance, it is important in technology in order to create aesthetically pleasing PowerPoint presentations and multi-media displays that showcase work and make the information and facts presented memorable. Art can be metaphoric creating simple icons or images that

ground larger more complex ideas. Multicultural awareness is improved through the study of art as it instantly connects viewers to different cultures. Indeed, due to the diverse power and inherent potential of art to create deep emotional connections and aid in memory retrieval, some educators think the arts should be named as the fourth R.

**Factors developed through music, art and drama:**

**Intelligence** - It is now well known that intelligence is not a static structure but an open dynamic system that can continue to develop throughout life, intelligence is developed through the mediation of experience by a sensitive, supportive teacher or an orchestra conductor, or a theatre director, or a choreographer. The arts provide the means to know one's culture at a very deep level. They provide rich multisensory experiences that engage the whole mind-body-emotional system. Intelligence does not lie just in the minds of individuals. It exists in our interaction with other people; in the resources in our environment such as books and other published materials, radio and television, art exhibits, concerts, and plays; and it exists and grows through the tools we use such as hammers and chisels, pens and paper, word processors and calculators, computers, paint brushes and musical instruments.

**Individual Differences** - The arts not only contribute richly to the development of human intelligence, but they offer the means to reach the great diversity of human beings in every school today. It would be easier to achieve significant educational achievements if everyone learned in the same way, but not everyone does. In all schools today there is a growing diversity of students with different cultural, social, and economic backgrounds that result in very different ways of thinking, learning, and behaving. In our Seattle schools, over a hundred different languages are spoken. Children with different kinds of abilities and disabilities are in the same classrooms. Children from disadvantaged families learn together with more economically privileged students.

**The Visual Arts** - Children today are growing up in a highly visual world, surrounded by the images of television, videos, advertising displays, and other media. The human brain has a visual cortex that is five times larger than the auditory cortex. Is it any wonder that students respond so positively when they have opportunities to learn through the visual arts? And is it any wonder that words alone do not reach all students? A picture is indeed worth a thousand words.

Teachers who taught reading reported that children who learned to draw and see through her visual alphabet had dramatic increases in letter recognition and reading readiness.

Conclusion: The use of music, art and drama in education plays important role in enhancing the achievement of many subjects in students of different standards. It creates healthy atmosphere and enables the learning.

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