

**RESEARCH PAPER****Applications of Brain –Based Approach in Teaching–Learning of English Language: A Recent Trend in Teacher Education****Antara Mitra**

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Email: antaramitramusic@gmail.comReceived: 11th March 2019, Revised: 20th March 2019, Accepted: 30th March 2019**ABSTRACT**

Brain-based education, which is currently in vogue, offers a biologically driven classroom structure that corresponds to the functions of human brain at different developmental levels. The practice engages the entire body to enhance the learning process. As a part of this unique educational theory, teachers of English can make use of the classroom space to arouse all senses so that the learners can sense a brain-friendly enriched classroom environment. It can help the ESL and EFL learners feel stress free and gain alertness. It helps to stimulate social skills among the learners and help them retain better understanding of a concept through hands-on-teaching assignments. It focuses on artistic endeavors by English teachers through using art, music, crafts etc. which triggers images in the brain that reinforce complex ideas. It sets up a learning folder for each ESL learner where past work assignments provide tools for their reflection and self-assessment of progress. It aims at total body immersion in a topic and promotion of natural learning.

NEUROPLASTICITY OF BRAIN INVOLVING 3 PROCESSES FOR LEARNING ENGLISH LANGUAGE

The human brain is an experience-dependent organ and neuroplastic in nature. This neuroplasticity involves the processes of Proliferation, Pruning and Consolidation as neuroscientist Martha Burns (2019) opined. Proliferation is associated with brain building, and is highly dependent on childhood experiences like play, socialization and hearing stories, reading aloud etc. It involves creating new synaptic connections and fibre tract connections. For example, the predominant language or languages and familiar faces, voices and objects will become the data the brain uses to build new cortical maps and their interconnections. Pruning is another process involved in setting up the brain. Our efficient brains depend on eliminating connections that are not behaviorally relevant or useful. This competitive elimination process is also based on experience and results in pruning areas not used. An example is the elimination of auditory-perceptual connections that might be helpful for learning a foreign language, making it more difficult to learn a second language as we age. Consolidation is the third process occurring during early brain maturation which helps us respond to things automatically, without thinking. The human brain is a statistical analyzer. After thousands of repetitions of slightly disparate stimuli, it begins to map for commonalities. This allows the brain to develop anticipatory response patterns, or a set of common reactions, which minimizes effort and increase speed and efficiency. Since the human brain is a parallel processor, i.e., does many things at a time, English language teachers need a frame of reference that enables them to select from the vast repertoire of methods and approaches that are available to make orchestration. Patterning refers to meaningful organization and categorization of information. The brain is designed to perceive and generate patterns. English language learners pattern, perceive and create meanings all the time according to Brain based research. Therefore information should be organized in such a way that allows the brain to extract patterns. The English language teachers can influence the direction in this regard. Emotions are critical to patterning. They are crucial to memory because they facilitate the storage and recall of information. The emotional climate in the school and English language classroom must be monitored on a consistent basis. The environment needs to be supportive and marked by mutual respect since the brain downshifts under threat and learns optimally when appropriately challenged.

MERITS OF BRAIN BASED LEARNING IN ELT CLASSES

Haley (2010) states that, "Brain teaching emphasizes how the brain learns naturally and is based on what we currently know about the actual structures and functions of the brain at several developmental stages. Although brain-compatible teaching is not a panacea or magic bullet to solve all of education's problems, as teachers we must understand certain principles and use effective strategies in purposeful ways."

Brain Compatible Theories of Teaching and Learning:

Gardner's theory of Multiple Intelligence: According to the Multiple Intelligence Theory put forward by Howard Gardner, some individuals would likely possess different language competencies. Students can attach meaning to the language input in foreign language classrooms only if this information matches their individual language competency. Here the responsibility of language teachers is to vary their instructional strategies to address multiple intelligences. Howard Gardner suggests that there are eight intellectual variables associated in human performance and he has also delineated some activities that can be used in English language classrooms for each intelligence type. Those are activities strengthening 1. verbal-linguistic intelligence, 2. logical-mathematical intelligence, 3. visual-spatial intelligence, 4. Bodily-kinesthetic intelligence, 5. musical-rhythmic intelligence, 6. interpersonal intelligence, 7. intrapersonal intelligence, 8. naturalist intelligence.

Wilson (1998) lists the most common reasons why some educators seem to be drawn to using Multiple-

1. Has been adapted and interpreted by many intermediate writers who have made it easy for both teachers and parents to see the value of the concept and its applicability to uses in the classroom. This broad range of interpretations at intermediary levels makes related techniques easy to understand and use by both pre-service and practicing educators. Also, due to the proliferation of medial interpretations, related conference presentations and accessible classroom materials (in addition to associated articles for parents in current media) MI has become so popular that the concept has become much like a grassroots movement.
2. Aids teachers in easily creating more personalized and diversified instructional experiences.
3. Offers teachers assistance in helping students become empowered learners by extending and promoting cognitive bridging techniques based on the seven intelligences; by fostering deep metacognitive understanding; and by advancing suggestions for a broad array of diversified study skills techniques.
4. Helps teachers explain and promote understanding at intrapersonal, interpersonal and cultural levels.
5. Taps into students' intrinsic levels of motivation through natural talents, thus helping teachers construct self-motivating educational experiences and ones which help promote the concept of flow in the classroom.
6. Often validate teachers' insightful and intuitive assessments of students' natural talents and offers them justifications and assistance in creating related personalized educational accommodations and experiences.
7. Provides teachers, parents and students with a more extensive and egalitarian conceptualization of giftedness.

Some Sample Questions that can be asked to the Learners of ELT Catering to Brain Based Approach are as Follows:

1. Do you like listening to music?
2. Do you like dancing and acting?
3. Do you like jokes related with Mathematics?
4. Do you like puzzle games while learning the new words on your course books?
5. Do you like animals?
6. Do you like singing songs?
7. Do you play any instrument?
8. Do you like cooking?
9. Do you like your hometown and your neighborhood?

SAMPLE ACTIVITY FOR LISTENING CLASSES

After the learners are exposed to listening 3 or 4 different songs they can be asked the following questions:

1. What kinds of things did you imagine?
2. Did the songs make you feel happy or unhappy?
3. Can you describe the sounds you heard in the songs?

SAMPLE ACTIVITY FOR READING CLASSES

Before reading, the learners can be instructed to skim and scan on the reading passages. After reading, they can be asked to reply the following questions (Haley, 2010)

1. What is the story about?
2. What do you think will happen next?
3. What has happened?
4. How did your predictions turn out?

SAMPLE ACTIVITY FOR WRITING CLASSES

(Clanfield & Benne, 2011)

1. Think of the most impressive or beautiful building in your town or a town nearby. Write a short paragraph describing this building for an English travel brochure. Your paragraph must have at least three sentences.
2. Work in pairs. Compare your paragraphs.

SAMPLE WARM UP ACTIVITY

Before the activity, learners can be asked to bring photos to class. They can be asked to reply the following questions to learn gestures-

1. Do you think people are happy on the photos you looked at?
2. Which adjectives and adverbs can you use for the photos you looked at?

BRAIN GYM EXERCISES AND IMMERSION PROGRAMS

Brain Gym exercises can make all types of learning easier. Also, when the brain's natural tendency to construct meaning from patterns is used in second language teaching, classroom learning can become more like learning in real-life situations. The most effective language acquisition can be achieved in immersion programs because of the fact that they provide both meaning and context, which are necessary elements for the brain to take up a second language. Genesee (1994) also added that in immersion, second language teaching is embedded in a rich and meaningful communicative context. The goal of language learning is not grammatical perfection, but meaningful communication among students and teachers. Students remain motivated to learn the second language when they have a sense of academic accomplishment and of increasing competence in using the second language for communicative purposes. The behaviorist notion of "practice" as a means of learning, which is prevalent in conventional programs, is replaced in immersion-type programs by the notion of "creative construction", in which learners are encouraged to experiment with linguistic forms in order to communicate with one another and with teachers about their academic and social matters. Errors in language use are not seen as bad, but rather as indications of the learners' sincere and active endeavors to master a complex linguistic system. Teachers here play the role of facilitators of language learning and reinforce their linguistic message with gestures, facial expressions, pictures and concrete materials and even with didactical stories in order to facilitate communication, making the learners feel safe and secure and nurturing an atmosphere of trust. Brain-compatible learning environment is one of the crucial elements for any language program to be successful. In this body-friendly environment the furnitures should be rearranged to provide more space so that the students seat comfortably. This reduces stress by allowing students to have more personal space. Furthermore the environment needs to be enriched with emphasis on objects from real world. A lot of resources should be made available to the learners. Few principles of Brain based language education, that match with the school climate and population, can be implemented in school setting for optimum utilization of

resources already available and which are likely to be available for productive academic output. Competency in English language is a must in socio-cultural context of any country for access in higher education and gaining employability. In order to survive and thrive, functional knowledge of English language is mandatory since it generates nationalism and cosmopolitanism as well. It enhances one's competitive skill in global perspective. In countries characterized by tantalizing cultural diversity, English language will help one gain increased access to social network among different linguistic communities by abolishing linguistic and cultural boundaries and developing better understanding of the customs of different communities-a precondition for inculcating nationalism among the learners. It is expected that Brain based teaching-learning in English language will help the students and teachers to study their lessons more effectively and help them to be more successful.

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