

Brain-based Learning: A Remedy to Teaching EFL in China

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ABSTRACT. *In essence learning is brain work. An approach of learning that claims to fit the way the brain works is examined in this paper. Brain-based learning brings out great importance of environment, meaningful content and learners' uniqueness in effective learning. This paper discusses the remedy function of this approach in China's EFL teaching and learning in three aspects, with an aim to offer some inspirations in EFL policy making and classroom teaching and learning.*

KEYWORDS: *brain-based learning; EFL teaching*

1. Introduction

Most Chinese students who have studied English for more than 10 years still cannot use the language for basic communication. Despite their enormous effort, their achievements in English are disappointing. This “time-consuming but ineffective” EFL (English as a Foreign Language) teaching and learning situation and the “Mute English” may be a headache that bothers nearly every teacher, student and even their parents. Although many educators and policy-makers are all the time making concerted efforts to reform the present English education for better effectiveness, the results are not so satisfying.

It is known that idea determines action and action may bring good results only if steered in the right direction. In this sense, the reform of teaching EFL should have been first started with the change of the educational conception, an optimal conception that fits “the way the brain works” (Deveci, 2010), that is, the way humans learn. This is how brain-based learning serves the education. Brain-based learning, an approach to learning and teaching “based on the way the brain works” (Deveci, 2010), in the view of the paper, can be regarded as a new blood instilled into today's reform of teaching EFL in China. Among so many ideas and principles derived from brain-based learning, three highlights will be summarized that are of vital importance as a remedy to teaching EFL in China for elaboration as follows:

2. An appropriate state of both the body and the mood affect the mind/brain in effective learning

One of the twelve principles of brain-based learning put forward by Caine (1994) is that “Learning engages the entire physiology”, which means that an appropriate state of both the body and the mood is crucial to learning. Studies show that “regular aerobic exercise improves circulation and efficiency throughout the body, including in the brain, and makes you more alert and relaxed, and can thereby improve your memory uptake” (Deveci, 2010). That is to say, doing some physical exercise can indirectly increase the speed of learning process. Therefore, some “Brain Gym exercises that include physical movement and co-ordination such as pat head and rub tummy” (Deveci, 2010) are recommended in classroom activities. This also explains why the primary and high school students in China are required to line up and do the National Radio Gymnastic Exercises regularly during the twenty-minute break in the morning. But as for English classrooms, seldom do the Chinese teachers incorporate some Brain Gym exercises into their practical teaching, which may be attributed to shyness or introversion of both the teacher and the students.

We already have this common sense that the brain’s normal performance is very likely to be obstructed if the body is not in an appropriate state. However, having a good physical condition is not enough for effective learning. Human emotions also count greatly in the normal function of “the whole physiology”. Studies in neuroscience have further confirmed the idea that emotions or feelings together with the body affect the brain function in a physiological way: one’s thought created a physical response in his body. So, his physical body can change his thought or feeling, and his thought or feeling can change his physical body. And this all happens through peptides being released and binding to receptors as a consequence of his physical actions, his thoughts or his feelings. Also, many scientific studies have offered strong empirical backups to Krashen’s Affective Filter Hypothesis (Nunan, 2001). It states that students who are in an appropriate state of mood will learn better than those who are not. In the shoes of a teacher, we must notice how our behaviors and attitude towards a student influence his emotions. In this sense, a teacher is more than an instructor; a teacher is a psychologist, a mentor, or even a role-model who possesses good manners and morals.

To make sure the student is in a sound mood for learning, the “psychologist” has to take notice of the subtle mental changes of every student, even the ones who are sitting in the corner of the classroom. If any negative emotion is sensed from a facial expression, an eye-contact or even a complaining whisper that occurs in the classroom, the “psychologist” should try to counter it by helping the student to feel “safe and relaxed” (Caine, 1994). In China, every prospective teacher must take a course named Educational Psychology and pass the corresponding exam, and only those who have passed it are qualified to apply for the Professional Teacher Certificate. This shows the Chinese educators and policy-makers’ agreement on the role of a teacher as a psychologist.

As a mentor, from whom students can learn a lot, and in whom they believe, a

teacher is a friend to all of the students, either with high scores or low scores. Respect and encouragements from the teacher are very important to students especially to those who perform poorly. There is a trend that a student who often gets a “C” or below is many times ignored and even criticized by his teacher just because he seems weak in the discipline taught by the teacher. Human emotions are easy to be sensed and affected. The long-term negative attitude the teacher holds toward the student can easily lead to a lower level of the student’s confidence and motivation while intensifying the student’s anxiety in learning (in Krashen’s Affective Filter hypothesis, Nunan, 2001). All of these affective factors, as the Affective Filter asserts, will negatively influence the student’s intake of what he is learning.

In terms of affective factors, a student’s attitude and emotion towards his teacher may also be influenced by a teacher’s behaviors. Saying dirty words, being rude, holding gender discrimination or inflicting a personal attack will undoubtedly result in a strong negative attitude toward the teacher from his students. Therefore, those who have a questionable social judgment should think carefully about taking on the responsibility as a teacher. On the contrary, a teacher who is popular with the students is much more likely to exert positive influences on them. For instance, motivating them to learn well, calling forth or nurturing their interest or tendency, and setting a good example for them as a valuable and wise person.

3. Each brain is unique and everyone has a talent in his own positive tendency

To make sure students are in a good physical and emotional state, the teacher is supposed to, all the time, bear the principle in mind that each student has his own advantages and no one can be regarded as inferior. Only if such awareness is built up, may the teacher prevent himself from ignoring or criticizing the students who perform not so well in the discipline he teaches. It is known that the structure and the function of the brain are the most complicated in the entire human physiology, and it becomes much more complex when it comes to each individual. There are no two identical leaves in the world, so are the brains.

Howard Gardner’s theory of Multiple Intelligences, including nine ‘intelligences’, has been widely accepted as a way to analyze and to describe the properties of the human brain and its related abilities. However, from the author’s perspective, it does not cover all the “intelligences” possessed by human beings. We all know that the brain has a great potentiality. However, because of the limitation of the current science and technology, there are still parts of the human brain, which the author would like to call “dormant zones”, need to be explored. With such “dormant zones” existing, how many “intelligences” people possess besides the nine is a question that cannot be answered. As Charles Darwin has proposed that the human evolution is proceeding constantly, so is the brain. We will not be certain of how many and what intelligences people are likely to possess in the future. Apart from this puzzle, the author find another problem of the Multiple Intelligences Theory -- it cannot explain some cases. For example, why some students do well in

English learning but learn the Chinese language not so well. Having the capability to learn English well shows that they do have a good or at least decent “linguistic intelligence” (Gardner’s theory). But if they hold such intelligence, why do they perform poorly when it comes to the Chinese language learning? Maybe there are some other contributing factors such as different interests in the two languages. This case indicates that how the brain functions in learning is not a process that can be simply categorized into the nine or more “intelligences”.

Moreover, what should be attached importance to is the fact that everyone has his own tendency because “each brain is unique” (Caine, 1994). However, some teachers ignore the fact and tend to judge their students according to a certain fixed criterion that those who are good at the subject he teaches are intelligent while the others are not. Eventually, it leads to his discrepant attitudes towards those two groups of students. Unavoidably, this kind of attitudinal discrepancy shown explicitly or implicitly affects the second-group students’ emotions in learning. They, as a result, will learn worse and worse; it is a vicious circle. For a healthy emotional state as mentioned in the first aspect plays a crucial role in effective learning. How to balance the scales of the way we treat different students as a teacher? The key lies in a strong awareness that each student has a talent in his own positive tendency. The teacher should keep an eye on each student and find out what his tendencies are, in order to catalyze the encounter of tendency and opportunities.

Each brain is unique and needs further exploration. There is a great chance for the teacher to help to activate some “dormant zones” that are in charge of some potential abilities in each student’s brain. On the one hand, a teacher is said to have accomplished his duty if he improves an “A” student’s academic results. While another teacher is more admirable and is considered successful if he changes a poor student’s attitude, even just a little bit more positively toward the subject area being taught. Because the “A” student, in most cases, intrinsically has a tendency already in the subject discipline.

4. Meaningful and real-life learning experiences are long-lasting in students’ memory

Knowing the importance of treating students friendly and equally in a classroom, the teacher should also have an idea of what kind of teaching will exert a long-term influence on students. As Caine (1994) asserts the search for meaning is innate, most people have asked curiously questions in their childhood, such as “why are boys and girls different from each other?” or “Why are there days and nights?”. When we search for the meanings we show our interest in various things. This kind of interest or curiosity motivates us to learn. When we take ownership of our learning, the knowledge acquired can be more lasting. This gives another explanation why theme-based learning method affiliated to Content-based Instruction is so commonly adopted in China’s English teaching. Traditional language teaching approaches and methods are very mechanic and dependent much on students’ rote memory. For example, the grammar-translation method in which students learn the English

language by memorizing grammatical rules and doing translation drills. Unlike them, the theme-based learning method enables students to learn the language in a natural and meaningful way. They learn it by using it rather than learn it first and then use it. When the language knowledge is integrated into various contextual themes, it will be more interesting and meaningful because people tend to gravitate towards what caters for their tendency and needs. This way, they are willing to learn rather than forced to learn.

Real-life learning experiences will add meaningfulness in classroom EFL teaching and learning. Many students in China have such doubt “why do I have to try so hard to learn the English language which is scarcely used in my daily life”. Students show little interest and learn ineffectively when learning is far away from their real life, because they may easily forget what they have learnt if it is left aside after class and seldom reviewed or used again. It is obviously much easier for students to accept and absorb the knowledge that is most relevant to their real life based on which their “storehouse of knowledge” is mainly constructed. If the English language could be taught and learnt by using it in real-life or simulated situations instead of merely teaching grammar and doing exercises in the classrooms, hopefully the “time-consuming but ineffective” problem in China’s EFL teaching will be alleviated to much degree.

The big challenge for Chinese students to learn English effectively is that the language they are learning is, for the most part, meaningless for their real life usage. What they are taught is away from their real life situations and seldom do they have opportunities to put formulaic knowledge into practical use. This kind of phenomenon proves what Benjamin Franklin said “Tell me and I’ll forget. Teach me and I’ll remember. Involve me and I’ll learn.”

What is the main purpose of learning a foreign language? The answer is very simple: to communicate. Then why do we, either as students or teachers, have tried so hard to learn English in a way that is meaningless in or far away from our daily life? It’s a serious problem confronting students, teachers, educators and policy-makers in China.

5. Conclusion

Many problems exist in the Chinese EFL teaching system. Teachers, educators, and policy-makers all have noticed these problems and they, as mentioned above, have been taking measures to improve the English education process. A national reform of English education in China has been indeed started since the 21st century, but the effects are not so outstanding even with enormous efforts. What can we turn to? The answer is the human brain. We always spend lots of time and energy in deliberating which teaching methodology is best suitable for the primary pupils or what kind of teaching materials can be best matched with the level of the college English-major students, but seldom do we ponder on how humans learn through their learning device--the brain. Learning is unquestionably dependent on the brain. Having a clear idea of how the brain influences learning is the key to teaching

effectively. Studying how the brain influences learning, brain-based learning approach has put forward many useful principles and ideas of both teaching and learning, *Caine's twelve principles* to name an example. The three aspects elaborated above were summarized on the basis of the twelve principles which hopefully will bring some enlightenment into China's situation of English education. If brain-based learning approach and its related ideas and principles are implemented and practiced, those long-standing problems of teaching EFL in China will be solved. In brief, brain-based learning can be seen as a remedy to the English education in China.

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