

The Application of the Brain-Targeted Teaching Model In College English Teaching

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Abstract: The 21st century is called the century of the brain. The Brain-Targeted Teaching Model is an effective teaching model that combine the comprehensive study of neuroscience and cognitive science, which involves teaching and learning process. By analyzing the application of The Brain-Targeted Teaching Model in college English teaching, it opens an door for English teachers focusing on brain science and English teaching, deepens their understanding of college English classroom and English teaching, and provides a new perspective for participating in curriculum reform.

1. Introduction

Since the United States declared that its country enter into “The Decade of Brain”, other countries have noticed the great importance to the study of the human brain, they invested a large amount of labor and material resources into the specialized research. From then on, Brain science has achieved great accomplishments on the research of human being brain since the 20th century. Brain science believes that "learning" is an activity formed by neural circuits in the brain under outside stimulation, while "education" is the control activity of outside stimulation and the encouragement activity of learning behavior. Therefore, learning and education are both responses of the brain to outside things, which need to be processed by our brain. Back in 1978, Jeanne Chall made the first use of brain knowledge in English teaching in her book, Brain and Education. Since then, many educators have been keen to apply brain science to education. In 2003, Mariale Hardiman, the president of education department in the Johns Hopkins University and the initiator of the neuroeducation, created The Brain-Targeted Teaching Model that provided a new way for us to explore college English classroom construction. Her book, The Brain-Targeted Teaching Model for 21st-Century Schools, applies the results of brain science to the class directly and develops The Brain-Targeted Teaching (BBT) Model, which has aroused the wide interest of educators. BBT model focuses on how students learn rather than what they learn, thus promoting self-directed learning and creative thinking. Under her leadership, Roland Park school, her working place, became the nation's blue-ribbon school.

2. Design of the Chip Kick Mechanics

BBT model, as an education tool, applies the knowledge of neural and cognitive sciences to education field, which can not only cultivate students' language application ability but also improve their self-learning ability and lifelong learning ability. By introducing The Brain-Targeted Teaching Model, visual arts and performance arts can be designed into teaching activities, and the teachers can use specific activities to strengthen their students learning. More than that, the teacher also can improve students' ability, expand their knowledge and demonstrate their creative thinking through new projects, assignments and tasks under the guidance of 6 Brain Targets, which are the teaching process mentioned by Mariale Hardiman. Next, let's see how BBT model's 6 Brain Targets participate in our English classes, and how these six goals are designed into the English teaching activities.

2.1. The Combination of 6 Brain Targets and English Teaching

Target 1: To create an enjoyable emotional atmosphere for English learning

As a language, the main goal of learning English is application. It is widely believed that communication is the most effective way of application. How to help students to use English to communicate with foreigners and to obtain the information and useful material from English book or website requires teachers to create a positive emotional atmosphere to promote students' learning initiative. BBT teaching model emphasizes that teachers should create some special activities that can promote positive emotions, which allow students to establish emotional connections with the class. For example, the teacher can allow the students to choose art forms or skills to show their understanding of language and grammar points, in that way, they will feel more enjoyable. A study has shown that people learn best when they are stress-free and happy. To study in the way they like is the most desirable way for learning and, this is the same function like our Chinese saying that interest is the best teacher.

Target 2: To create a good physical environment for college English learning

No one can deny that not only the desirable emotional atmosphere, but also a provocative physical environment is good for English learning. BBT teaching model suggests that teachers should use new and different stimuli in class to attract students' attention and cultivate students' interest in learning. We know that the arrangement of College English textbooks are mainly based on subjects, and each subject of each unit are closely related to our lives. The student are more familiar with this topic, we can use this theme ideas to decorate our classromm, for example, In the classroom, the subject blackboard newspaper, column of English motto, English painting and other forms can be changed regularly to increase students' attention and participation in task-oriented activities by using this feature. Research shows that our brain's attention system is most sensitive to new things. Innovative things not only have a active effect on attracting attention, but also have a positive effect on the brain's memory system. For example, a study by Smith Glenberg and Bjork (1978) revealed that student's learning effect of vocabulary was better in two classrooms than in one. Therefore, frequent changes in the learning environment have a significant effect on attracting attention and improving memory. The change of physical environment is helpful for us to improve the teaching effect.

Target 3: To design a scientific English learning experience

Brain studies have found that the brain always seek similar patterns and associations between what we learn recently and the information stored in our memory (Posner&Rothbart,2007). As mentioned in the previous, most of the English textbooks are arranged by theme, from one subject to another. There no connection between each other, but in this way, students are likely to miss the overall concept or "big picture" of the teaching objectives, which are important for deep understanding and memory. Because of the arrangement, there is no other way to deal with it, it only can rely on the students themselves to establish a similar connection. But most of the time, students learn knowledge points in isolation, unable to connect with what they have learned previously and what they are learning. BBT model emphasizes that teachers use the mind map or overall picture to present learning objectives, contents, activities and assessment mechanisms and others. This kind of overall plan can reveal the connection between the themes, help the students to understand the relationship between the activities and the learning objectives, and lighten them to understand the objectives of the course. Therefore, teachers can use visual map to represent an overall picture and the relationship between new information and old knowledge to students, design English learning experience, and cultivate their ability to use language to obtain information. This learning experience are mor scientific for learning.

Target 4: To instruct knowledge, skills, and information

There is no doubt that learning and memory are closely linked. Learning is the acquisition of new information, while memory enables the information to be stored and retrieved after a period of time. BBT model combines the connection between language learning and the rule of memory to help the students to master the knowledge, skills and information of college English in the form of artistic integration according to how information and experience are processed in our brain. For

example, song, role play and painting are the most appropriate way for teaching in the English class, which involves the process of information obtaining, transforming and transferring in our brain. The Brain-Targeted Teaching Model suggests that the teachers should apply various ways to teach in order to help the student to memorize the language points what they need to learn.

Target 5: To teach the extension and application of knowledge

In the traditional teaching model, in order to help students master the teaching objectives and evaluate the teaching effect, the most typical way is to use unit tests to evaluate the students. However, as a language tool, the real mastery of English is not the ability to get high scores in the exam or get the right answer to the question, but the ability to master English in the real world and use it to solve real problems. BBT teaching model emphasizes that teachers should encourage students to utilize what they learn in our classroom to solve tasks in the real world in a meaningful and active way. And the most important thing is to apply the language skills and knowledge they have learned to communicate with each other and obtain information what they want. Moreover, teachers should focus on the expansion and application of knowledge to improve students' language application ability in their daily life. In conclusion, We should teach students not the knowledge itself, but the expansion and usage of knowledge, offer them to learn to use.

Target 6: To evaluate the student

Learning must have results, and students are expected to have good learning results, which need the help of a right assessment system to achieve. Different from the traditional evaluation system, BBT teaching model pay more stress on the continuous assessment and multiple assessment methods to enhance students' ability to learn English, to memorize the language point that the teachers instructed, and to cultivate students' divergent thinking. Learning is a continuous process. Therefore, students' learning should be evaluated according to this rule. Only the final exam is far from a fair and impartial evaluation of their learning results. We can see that the evaluation method under the guidance of BBT model can better meet the needs of evaluation, which is more scientific and reasonable. Such as the current popular evaluation method, portfolio assessment and learning log, etc.

2.2 The significance of The Brain-Targeted Model in College English Teaching

2.2.1 Changing the traditional model of the college English teaching

Applying the results of brain science to educational field, teachers can focus on how students learn and how the brain perceives, processes and memorizes information. With the help of the research achievement of brain science, teachers can organize the teaching plan based on the understanding of the thinking mode in our brain. We can create some classroom activities based on the pattern of learning in our brain. For example, scientist suggests that the brain likes to process information that is similar in real life, under the circumstances, teachers can associate the learning objectives of the course with real life problems, so as to train students to use English in real situations to promote students' independent learning, which is the best study condition to arouse their learning interest.

2.2.2 Stimulating the students' interest in learning.

As mentioned above, BBT model offers the students some opportunities to apply their skills and knowledge that they have learned in the class, thus they can solve the real problem in their daily life. To put what they have learned into practice can fundamentally arouse students' interest and enthusiasm in English learning and enhance their self-confidence. That is to say, learning useful things can promote the study motivation. Once study motivation is established, one will love learning from the bottom of his heart, if so, it is no problem to form a virtuous circle. In this way, they will more desire to learn and to apply knowledge quickly.

2.2.3. Creating a positive and happy learning atmosphere

Different from traditional teaching models, The Brain-targeted Teaching Model focuses on the enjoyable emotional atmosphere and desirable physical environment in the learning process, which

can effectively reverse the teaching status quo that only attaches importance to the imparting of English language knowledge and ignores the cultivation of emotional education. Emotion and environment are two important factors that are often ignored in the traditional classroom, but we have to say that they have big influence on our learning result. There is a popular belief that it is impossible to learn well when one is angry and unhappy, and while we are happy, we often get twice the result with half the effort. It is useful for teachers to create a harmonious teacher-student relationship and favorable emotional atmosphere for us.

2.2.4. Enhancing the learning effect

No one can deny that art can relax ourselves, and thus enhance memory. Using the artistic technique in class teaching can improve the students' receptivity, which can also help them to learn better. For example, we are using music for emotional regulation, partly because of the way it can modulate our neurochemistry, affecting our moods. Art allows children to express themselves creatively, not by rote learning. The Brain-targeted Teaching Model adopts the method of integrated art into education to improve and enhance the learning effect, help them to improve the speed of information storage, pay attention to the transfer and reinforcement of knowledge, and enable students to have more stable learning habits and transfer ability.

2.2.5. Broadening teaching angle

College English teaching aims to cultivate the students' comprehensive ability to use language, that includes listening, speaking, reading and writing. We always pay much stress on the practice because we hold on that practice makes perfect. The Brain-targeted Teaching Model provides a new angle for college English teaching from the perspective of brain science. It can promote the change of teachers' role, and promote the teachers' quality completely and efficiently. From now on, English teacher is not just a linguistics teacher but also a neurologist. They use interdisciplinary knowledge to serve teaching and make teaching more effective.

3. Conclusion

At present, education for all-around development is advocated and education reform is carrying out, it is necessary to apply the research results of brain science to provide a new way and theoretical basis for the development of education. The Brain-Targeted Teaching Model is a practice teaching transformation, which draws the latest research results of brain science into education field. Through teaching design, teachers transform the "6 Brain Targets" into specific teaching steps. Under the guidance of this model, teachers build the college English class oriented by brain science according to the characteristics of human brain learning, and use brain science theories to guide practical research of classroom teaching, stimulate students' interest, and improve students' English communication ability. In the process of this research, the author combines theory with practice, and tries to explore an effective way of college English teaching, so as to mobilize students' initiative in learning. In a word, We should respect the learning law of the brain and provide guidance for our teaching practice in education. BBT model draws on the essence of psychology, neuroscience and pedagogy to construct a scientific teaching model for us.

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