TEACHING ENGLISH THROUGH BASED BRAIN STRATEGY TO YOUNG LEARNER

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Abstrack:
English has a need for some people around the world. People been struggling to learn and master English actively. And so teachers around the world been struggling to find the best way to teach the students of how to master English well. Not many people realize that the ability to speak and to master new language is an innate ability. Its in the brain. When the teacher are able to dig thebrain potential of the students than all the problem of learning English suffered by the students are solved. In this article, the author will show what our brains do when students listen to you. Most particularly, we will show how the brains of infants and children are tuned to understand language, and how changes in the brain during development serve as preconditions for language learning. Understanding language is a process that involves at least two important brain regions, which need to work together in order to make it happen. This would be impossible without connections that allow these brain regions to exchange information. The nerve fibers that make up these connections develop and change during infancy and childhood and provide a growing underpinning for the ability to understand and use language. We will show you how to gain students' brain potentiality. So, they can learn English maximally like their own language.

Keyword; Teaching English, Based Brain Strategy, Young Learner

A. The Importance of Learning English in Early Young learners

In its development, currently English is not considered something foreign to students in Indonesia. In the past, English was considered a difficult subject to understand. However, along with technological developments that demand the need to master English, the curriculum in the world of education has begun to change. English, which was originally introduced to junior high school students, has now been introduced to elementary school students and even students who are still in Kindergarten or play groups have been introduced to this foreign language even though the context of learning is still learning while playing.

Learning English as a second language needs to be learned from an early age before individuals enter puberty. An English expert, Chomsky said *"there was a neurologically based "critical period", which complete mastery of language, but it is no longer possible, because it will end around the onset of puberty" "*. According to Chomsky, an individual has an important period (sensitive period) to be able to easily and quickly master language, which is called the "critical period" when the individual has not yet entered puberty. When puberty comes, the "critical

period" fades away so it will be difficult to master the foreign language[1] Another English expert, Plunket made observations of children from immigration families who came from other countries and settled in the USA. The study found that these immigration children, who had not yet reached puberty, could speak English with good pronunciation like a native speaker. Meanwhile, the parents cannot reach the abilities like their children. Indeed, these parents can speak fluently but they have difficulties in pronunciation, word selection, and grammar that should be used.

A. Characteristics of Early Young learner Learning in English

In its development, early young learner has special characteristics that educators must recognize. Even though they are individuals who absorb language the most quickly, it should be considered that they do not have emotional maturity so they need special handling in learning languages. Hafina explained that early young learner has the following characteristics of language learning; 1. Stating the meaning in sentences consisting of 4 to 10 words, 2. Knowing and imitating sounds, 3. Understanding the command sentence, 4. Asking questions, 5. Mentioning the names of objects and functions, 6. Solving problems with simple dialogue[2]

B. English Learning Strategies For Young Learner

Wina Senjaya argues that the learning strategy is a learning activity that must be done by teachers and students so that learning objectives can be achieved effectively and efficiently[3]. The learning strategy contains the meaning of planning. This means that the strategy is basically still conceptual about the decisions that will be taken in an implementation of learning.

The types of general learning strategies are: (1) increasing sense engagement, (2) preparing environmental cues, (3) task analysis, (4) scaffolding, (5) guided practice, (6) invitation / invitation, (7) behavior / action reflection, (8) word reflection, (9) example or modeling, (10) effective appreciation), (11) telling / explaining / informing, (12) do-it-signal, (13) challenges , (14) questions, and (15) silence. These learning strategies can be integrated or combined in the entire learning

[1] Noam chomsky and B.f. Skinner, *'A Review of B. F. Skinner's Language Verbal Behavior' (Linguistic Society of America)*, 1959th ed., vol. 1, 1 1 (America: 1959, 1959).

[2] Anne Hafina, 'Karakteristik Perkembangan Anak Usia Dini', n.d., file:///D:/brain%20based%20learning/KARAKTERISTIK_ANAK_USIA_DINI.pdf.

[3] Wina Sanjaya, *Strategi Pembelajaran: Berorientasi Standar Proses Pendidikan* (Kencana, 2016).

process, so as to create more varied learning activities[4].

C. Young Learner Learning Strategy Selection Criteria

Learning strategy as all the efforts of the teacher in applying various learning methods to achieve the expected goals. There are various learning strategies that Kindergarten teachers can choose from. Selection of learning strategies should consider several important factors, namely: a. characteristics of learning objectives, b. characteristics of children and how to learn, c. the place where learning activities take place, d. learning themes, and e. activity patterns[5]

D. Types of English Learning Strategies for Young Learner

1. Learning Strategies Through Singing

a. Rational Learning Strategies through Singing

Singing has many benefits for children's educational practice and broad personal development because: 1) singing is fun, 2) singing can be used to overcome anxiety, 3) singing is a medium for expressing feelings, 4) singing can help build children's self-confidence, 5) singing can help children's memory, 6) singing can develop a sense of humor, 7) singing can help develop thinking skills and motor skills of children, and 8) singing can improve closeness in a group[6].

b. Syntax Learning Through Singing

The learning strategy with singing consists of the following steps.

1) The planning stage, consisting of:

(a) setting learning objectives, (b) determining learning materials, (c) determining learning methods and techniques, and (d) establishing learning evaluations.

2) The implementation stage, in the form of implementation of whatever has been planned, which consists of:

(a) initial activity: the teacher introduces the song that will be sung together and gives an example of how the song should be sung and provides directions on how the clapping sounds that accompany it.

(b) Additional activity: children are invited to dramatize songs, for example the song Dua Mata Saya, namely by pointing to the body organs in the song lyrics.

[4] Unknown, 'Model Pembelajaran Brain-Based Learning (BBL)', *MEDIA FUNI@* (blog), accessed 16 August 2019, http://mediafunia.blogspot.com/2014/07/brain-based-learning-bbl.html.

[5] Masitoh and dkk, *Strategi Pembelajaran TK* (Jakarta: Universitas Terbuka, 2007), 6.

[6] Kompasiana.com, 'Wawasan Baru tentang Fungsi Otak dalam Pembelajaran Bahasa', KOMPASIANA, accessed 16 August 2019, https://www.kompasiana.com/v_kk/5d0b4dfd097f364c867e4ea2/wawasan-baru-tentang-fungsi-otak-dalam-pembelajaran-bahasa.

(c) Development activities: the teacher helps the child to recognize high and low notes with a musical instrument, for example pianica.

3) The assessment stage is carried out using observation guidelines to determine the extent to which the child has achieved progress individually or in groups[7].

2. Learning Strategies Through storytelling

a. Rational learning strategies through storytelling

The achievement of kindergarten education goals can be achieved by learning strategies through storytelling. Masitoh et al. identify the benefits of stories for kindergarten children, namely as follows[8].

For kindergarten children listening to interesting stories and being close to their environment is an exciting activity.

Teachers can use storytelling activities to instill positive values in children.

Storytelling activities also provide a number of social knowledge, moral and religious values.Learning by telling stories provides a learning experience for listening. By listening to children's stories, it is possible to develop cognitive, affective and psychomotor abilities.Helping children to develop various roles that children may choose, and the various services that children want to contribute to society.

b. Learning syntax through storytelling

The learning strategy through storytelling consists of 5 steps. The steps are as follows.

1) Setting the purpose and theme of the story.

2) Determine the form of storytelling chosen, for example telling stories by reading directly from a story book, using pictures, using a flannel board, etc.

3) Determine the materials and tools needed in storytelling activities in accordance with the chosen form of storytelling.

4) Designating the steps for storytelling, which consists of:

a. convey the purpose and theme of the story,

b. arrange seating,

c. carry out opening activities,

d. develop stories,

e. set the technique of speaking,

f. ask questions related to the content of the story.

5) Establish a storytelling activity assessment plan

To determine the achievement of learning objectives, an assessment is carried out by asking questions related to the content of the story to develop children's

[7] Sanjaya, *Strategi Pembelajaran: Berorientasi Standar Proses Pendidikan*.

[8] Masitoh and dkk, *Strategi Pembelajaran TK*.

understanding, aka the content of the stories that have been heard.

3. Learning Strategies Through Playing

a. Rational learning strategies through playPlaying is a child's need.

Playing is an activity that integrates with the child's world, which contains various functions such as the development of physical motor skills, cognitive, affective, social, and so on. By playing, you will experience a process that leads to the development of human abilities.

a. Syntax of learning through play

The learning strategy through play consists of 3 main steps, namely: the pre-play stage, the playing stage, and the closing stage

1) The pre play stage

Tahap prabermain terdiri dari dua macam kegiatan persiapan: kegiatan penyiapan siswa dalam melaksanakan kegiatan bermain dan kegiatan penyiapan bahan dan peralatan yang siap untuk dipergunakan.

a) The student preparation activities consist of: (1) the teacher conveys the objectives of playing activities to students, (2) the teacher conveys the rules that must be followed in playing activities, (3) the teacher offers assignments to each child, for example making a palace , building, tower, etc., and (4) the teacher clarifies what each child must do in doing his / her job.

b) Activities to prepare the necessary materials and equipment, for example, preparing a sandbox, bucket, small flag, etc.

2) Play stage

The play stage consists of the following series of activities: a) all the children go to a place that has been provided to play, b) with the guidance of the teacher, the game participants begin to do their respective tasks, c) after the activity is complete each child rearranges the materials and play equipment, and d) children wash their hands

3) The closing stage

The closing stage of the learning strategy through play consists of activities: a) attracting attention and arousing children's interest about important aspects of building something, such as reviewing geometric shapes that children have formed, etc., b) connecting children's experiences in playing recently done with other experiences, for example at home, c) shows the important aspects of working in groups, d) emphasizes the importance of cooperation.

4. Integrated Learning Strategy

a. Rational integrated learning strategy

Children are whole beings, who have various aspects of abilities, all of which need to be developed. Various abilities possessed by children can develop if there is stimulation for this. With integrated learning,

learning that integrates into all areas of the curriculum or areas of development, the various abilities of children in children are expected to develop optimally.

b. Characteristics of an integrated learning strategy

Integrated learning has the characteristics: 1) carried out through direct experience activities, 2) according to the needs and interests of the child, 3) providing opportunities for children to use all their thinking, 4) using play as a vehicle for learning, 5) respecting individual differences, and 6) involve parents or family to optimize learning.

c. The principles of integrated learning strategies

Integrated learning strategies are planned and implemented based on the following principles: 1) oriented towards child development, 2) relating to children's real experiences, 3) integrating content and learning processes, 4) involving active discovery, 5) integrating various fields of development, 6) activities learning varies, 7) has the potential to be implemented through projects by children, 8) flexible implementation time, 9) involves the child's family members, 10) themes can be expanded, and 11) is revised according to the interests and understanding shown by the child[9].

d. Benefits of an integrated learning strategy

There are several benefits of an integrated learning strategy, namely[10]: 1) enhancing the development of children's concepts, 2) enabling children to explore knowledge through various activities, 3) helping teachers and other practitioners to develop their professional abilities, and 4) it can be implemented at different program levels , for all ages, and for children with special needs.

e. Integrated learning syntax

The procedure for implementing integrated learning consists of the following steps.

1) Choose a theme

The selection of themes for integrated learning can come from: (a) children's interests, (b) special events, (c) unexpected events, (d) material mandated by the institution, and (e) parents and teachers.

There are several criteria for selecting a theme, namely: (a) relevance of the topic to the characteristics of the child, (b) direct experience, (c) diversity and balance in the curriculum area, (d) availability of tools, and (e) project potential.

2) Theme description

The selected theme must be translated into sub-themes and concepts which contain terms, facts, and principles, then translated

[9] Masitoh and dkk.

[10] Masitoh and dkk.

into fields of development and more operational learning activities. .

3) Planning

Planning must be made in writing so that it makes it easier for the teacher to know what steps to take. Determine learning objectives, learning activities, time, child organization, reference sources, necessary play-tools, and assessments to be carried out.

4) Implementation

At the implementation stage, learning activities are carried out in accordance with the plans that have been prepared. During the process, observations are made of the learning process carried out by the child.

5) Assessment

Assessment is carried out at the time of implementation and at the end of learning activities with the aim of observing the process and progress achieved by children through integrated learning activities.

5. Child-Centered Learning Strategy

a. The approach that underlies child-centered learning

Children are individuals who are growing and developing. Children are also active creatures. Based on these facts, a learning strategy was developed based on: 1) a developmental approach and 2) an active learning approach[11]

b. Characteristics of child-centered learning

Child-centered learning has the following characteristics[12]

1. Initiative growth from children.
2. Child selects materials and decides what to do.
3. Child expresses ingredients actively with all senses.
4. Children discover cause and effect through direct experience with bjects.
5. The child transforms and combines ingredients.
6. Child uses rough muscles.

c. Child-centered learning syntax.

Child-centered learning consists of 3 main stages, namely: the planning stage, the work stage, and the review stage[13]

1) Planning stage (planning time)

At this stage the teacher gives the children the opportunity to plan the activities they will do. The teacher, for example, provides playing equipment consisting of: a) wooden blocks, b) fruit models, c) means of

[11] Masitoh and dkk.
[12] Masitoh and dkk.
[13] KUNTJOJO, 'STRATEGI PEMBELAJARAN UNTUK ANAK USIA DINI', *Sincerity* (blog), 27 July 2010, https://ebekunt.wordpress.com/2010/07/27/strategi-pembelajaran-untuk-anak-usia-dini/.

transportation, d) story books, e) drawing equipment, and f) kinds of -a kind of doll.

2) Stage of work (work time)

After selecting the activities to be carried out, children are then grouped based on the selected activities. At this stage the child begins to work, play, or solve problems according to what has been planned. The teacher accompanies students, provides support and is ready to provide guidance if the child needs it.

3) Review / recall

After the children finished their activities, they were then given the opportunity to share their experiences firsthand. At this stage the teacher tries to make the children express their feelings appropriately[14].

6. Based Brain Learning Strategy

a. Parts of the brain and its functions

Current language teaching often places students in a "silent" situation, which hinders students' creativity and ability because learning communication is only dominated by teachers (teacher centered) without involving the active role of students. During the learning process, teachers are not faced with inanimate objects, but they are facing unique creatures, who have an extraordinary combination of talent, competence, and brain. The specialty of humans when compared to other creatures lies in the brain and its ability to think. So it is unfortunate if the brain's ability to think is not optimized. Schools as formal educational institutions should be a forum that can optimize the brain's ability to think, and pay attention to facts about the importance of using the brain in the learning process[15].

To find out the importance of Based Brain learning, you must understand the parts and functions of the brain as follows. Buzan explains the function of each of these parts, namely[16]:

1. Cerrebum or cerebrum.

The cerebrum is divided into 2 parts, namely:

Left hemisphere, this part functions to control the right side of the body. The left brain functions in matters related to logic, ratio, writing and reading skills, and is the center of mathematics.

Right hemisphere, this section functions to control the left side of the body, and the development of Emotional Quotient (EQ). For example, socialization, communication, interaction and emotional control. In this right brain also lies the intuitive ability, the ability to feel, integrate, and body expression, such as singing, dancing, painting

[14] KUNTJOJO.

[15] Yulia Pratitis Yusuf, 'STRATEGI BRAIN BASED LEARNING DALAM PENGAJARAN BAHASA JEPANG DI MAN MOJOKERTO', 1, 4 (March 2017), https://journal.unesa.ac.id/index.php/paramasastra/issue/view/200.

[16] Tony Buzan, *Buku Pintar Mind Map* (Jakarta: Gramedia, 2009).

and all kinds of other creative activities. Below is a picture of the functions of the human left and right hemispheres. The left hemisphere is the motor control for the right side of the body and is the center of academic activity, language and human mathematical abilities. Meanwhile, the right hemisphere is the motor control for the left side of the body and is the center of intuitiveness, art and other human creative abilities

2. Cerrebelum (cerebellum or back)
functions to control body position, posture and balance, store memories to respond.

3.Brainstem (Brain stem, reptilian brain, primitive brain) its function is as a basic life support. Handling breathing and heart rate. Controlling the level of alertness, controlling temperature, digestion, and transmitting information from the cerebellum.

4. Limbic System (Limbic System, Mammalian Brain, Midbrain),
it is essential for learning and memory, retains memories of life experiences, and is involved in procuring sexual emotions and desires.

According to neurolinguistic studies, the proficiency center (linguistic grammar) is in the human body itself, namely in the cortex of the left hemisphere of the human brain in the form of Wernicke's Area and Broca's Field which is in the Angular Girus. Broca proposed 3 formulations regarding the relationship between the brain and language, namely "1) language articulation is processed in the front convolution of the three left hemispheres of the brain, 2) there is a predominance of the left hemisphere in language articulation; 3) understanding language is a cognitive task that is different from producing language[17].

Humans in general have never realized the complexity of language processes in the brain. As language teachers we must understand how language processes in the human brain. This is important to become the basis for selecting language teaching methods that are in accordance with the work system and function of the human senses. Along with the development of science, English teachers should carry out innovative brain-based learning or what is also known as Brain Based Learning, so that learning can be carried out effectively so as to produce output that is in accordance with the objectives of language learning, and in the end it will bring students to their abilities. use of English in the context of everyday natural communication.

b. Brain function in learning English

The left side of the brain is traditionally considered the center for language processing. But new research shows the right brain plays an

[17] Mangantar Simanjuntak, *Teori Linguistik Chomsky Dan Teori Neurolinguistik Wernicke* (Jakarta: Gaya Media Pratama, 1990).

important early role in helping learners identify the basic sounds associated with language. It can help find new teaching methods to further enhance student success in learning foreign languages. The left hemisphere is known as the language learning part of the brain, but it is the right hemisphere that determines its eventual success[18].

Learning a foreign language can increase your brain size. Researchers prove that learning a foreign language has been shown to have many benefits for improving brain function, including[19]:

1. Bilingual and multilingual brains improve cognitive function, which can delay the onset of Alzheimer's and dementia. Studies in Canada on people with bilingual brains help you stay healthy hat cognitively until the following years.
2. People who speak more than one language fluently have better memories and are more cognitively creative and mentally flexible than monolinguals.
3. People who learn more than one language are better at filtering out unnecessary words than people who only speak one language. The brains of those who speak only one language have to work harder to accomplish the same task. Researchers believe this is because being bilingual is a constant brain exercise.

Antonella Sorace, a linguist from the University of Edinburgh in Scotland, states that people who learn a second language can focus more without being distracted so they have a better ability to switch from one task to another than people with a monolingual brain, or who only learn one language.

5. Researchers found that adults who were fluent in two languages performed better on attention tests and had better concentration than those who only spoke one language, regardless of whether they had known the second language in young learner, young learner. or their youth. Language makes people more aware of how language works in general, which is called metalinguistic awareness.
6. Have a better memory, for example in remembering names, directions, and other things.

Caine revealed the involvement of five components in the brain's natural learning system, namely[20]:

1. The curious brain

It generates interest in new things. This is a component of the brain that tends to become

[18] Kompasiana.com, 'Wawasan Baru tentang Fungsi Otak dalam Pembelajaran Bahasa'.
[19] 'Meningkatkan Fungsi Otak dengan Belajar Bahasa Asing', *Hello Sehat* (blog), 15 December 2017, https://hellosehat.com/hidup-sehat/fakta-unik/belajar-bahasa-meningkatkan-fungsi-otak/.
[20] Frank Lixing Tang, 'Brain-Based Foreign Language Learning', *ESL Journal Robin Harvey New York University*, 2009.

more active when we are faced with new ideas and challenges.

2. The meaningful brain

Meaning is more important for nothing than information. The brain looks for meaning through imitation. Imitation enables the brain to store knowledge in memory.

3. The emotional brain

Emotion and intelligence originate from different parts of the brain, but they work in an integral and inseparable manner and can be enhanced using stimuli and challenges.

4. The social brain

Our brains are social. Social interactions and circumstances affect stress levels. The learning process will be more effective if it is carried out in a situation that is pleasing to the learner where the process of building an understanding structure, cooperative learning, and social interaction is possible in it.

5. The conscious and subconscious brain

Learning involves both conscious and subconscious processes. Learning does not only happen in the classroom, but also in everyday life.

E. Based Brain Learning in English Language Learning

1. Definition of Brain Based Learning

The notion of Brain Based Learning is a learning approach that is more parallel to how the brain learns best naturally based on the disciplines of neuroscience, biology, psychology, an understanding of the relationship between learning and the brain now leads to the role of emotions, patterns, meaning, environment, body rhythm and attitude, stress, trauma, assessment, music, movement, gender, and enrichment[21].

Brain Based Learning is a concept for creating learning that is oriented towards empowering the potential of students' brains. Brain Based Learning Approach Brain Based Learning is learning that is aligned with the way the brain is designed naturally for learning. Brain Based Learning offers a concept to create learning that is oriented towards empowering the potential of students' brains. In applying the Brain Based Learning approach, there are several things that must be considered because it will greatly affect the learning process, namely the environment, movement and sports, music, games, mind maps, and teacher appearance[22].

BBL suggests that education uses a learning system that prioritizes brain progress. BBL is a teaching model that considers how

[21] Erick Jensen, *Pembelajaran Berbasis Kemampuan Otak: Cara Baru Dalam Pengajaran Dan Pelatihan* (Yogyakarta: Pustaka Pelajar, 2008).

[22] 'Pengertian Brain Based Learning', accessed 16 August 2019, https://www.psychologymania.com/2013/05/pengertian-brain-based-learning.html.

the brain works when retrieving, processing, and interpreting information that has been absorbed, as well as how the brain works in retaining the messages or information it receives[23].

BBL requires teachers to understand how the brain works so that teachers can design learning that maximizes the use of students' brains when learning[24]. BBL is student-centered learning that uses all parts of the brain and recognizes that not all students learn the same way. BBL is also active learning that frees students to build their own knowledge of diverse and contextual learning situations.

2. The stages of learning Brain Based Learning

The stages of learning using the Brain Based Learning approach are[25]:

a. Pre-Exposure.

Pre-exposure helps the brain build a better conceptual map.

b. Preparation.

In this stage, the teacher creates curiosity and pleasure.

Initiation and acquisition This stage is the stage of creating a connection or when the neurons "communicate" with each other.

c. Elaboration.

The elaboration stage provides opportunities for the brain to sort, investigate, analyze, test, and deepen learning.

d. Incubate and enter memory.

This stage emphasizes that the time to rest and time to repeat it is important.

e. Verification and confidence checking.

In this stage, the teacher checks whether the students understand the material that has been studied or not. Students also need to know whether they have understood the material or not.

f. Celebration and integration.

This stage instills all the significance of a love of learning.

Based on the expert opinion above, it can be concluded that Brain Based Learning is a learning approach that is oriented towards empowering the potential of the brain based on the disciplines of neuroscience, biology, psychology, an understanding of the relationship between learning and the brain now leading to the role of emotions, patterns, meaning, environment, body rhythm and

[23] Unknown, 'Model Pembelajaran Brain-Based Learning (BBL)'.

[24] B Duman, 'The Effect of Brain-Based Instruction to Improve on Students' Academic Achievement in Social Studies', *9th International Conference on Engineering Education, 23-28 July 2006 in San Juan*, 23 July 2006, http://www.icee.usm.edu/icee/conferences/icee2006/ papers /3380 .pdf.

[25] 'Pengertian Brain Based Learning'.

attitude, stress, trauma, assessment, music, movement, gender, and enrichment.

3. Principles of brain-based learning

Furthermore, Tang explained the twelve principles of brain-based learning and their implications for learning, namely[26]:

1. The brain is a parallel processor.

The brain can present a variety of activities, combine emotions, imagination, engage the health system and process information for knowledge and intelligence at one time. Education must include and use all dimensions of this parallel process.

2. Learning is influenced by physiology.

Learning is a natural process as natural as the organs of the body when breathing and allows other organs to facilitate it. In fact, the real thread in us is not influenced by life and learning experiences.

3. The search for meaning is innate.

The process of taking lessons from the experience gained is a basic self-defense in the human brain. The brain needs and automatically records habitual things simultaneously by searching for and responding to new stimuli. Things that have become habits and new things must be combined in a learning environment.

4. The search for meaning occurs by imitating.

The brain tries to distinguish and understand things that are exemplified as they can happen and express them in a unique and reative form so that they can be understood by themselves. Effective education must provide opportunities for learners to understand in their own way. That means learners need opportunities to put their own abilities and ideas together in ways to understand.

5. Emotions greatly influence the imitation process.

What we learn is influenced and governed by emotions and feelings and involves personal expectations and prejudice, egoism, and the need for social interaction. Emotions and thoughts are tied together and cannot be separated. An artificial emotional climate is inevitable for a voice for education.

6. Each brain simultaneously observes and creates the parts and totals of acquired knowledge.

Although the right brain and left brain are different, the two hemispheres of the brain interact in every activity. The doctrine of the "two halves of the brain" is more useful in reminding us that the brain filters information into parts and observes it at one time. A good education will pay attention to this principle. One way that can be done is by introducing the

[26] Tang, 'Brain-Based Foreign Language Learning'.

material globally as well as the ideas from the beginning of the learning process.

7. Learning involves focused attention and broad perceptions.

The brain absorbs information received directly and also absorbs information from things that happen suddenly outside the focus of attention. In fact, the brain responds to all sensory connections during teaching and communication. This 'widespread perception' has great potential. Educators must be able to pay attention to all the possibilities that occur in the learning environment.

8. Learning always involves conscious and unconscious processes.

Much of our learning is the result of an unconscious process. Furthermore, it is a whole process of understanding. That is, most understanding may not occur during class but may occur hours, weeks, years later. The educator must arrange what he will do so that it can facilitate the next process that occurs unconsciously through the experiences that will be obtained by the defender jar.

9. We have at least two memory systems, namely spatial and rote.

Our natural spatial or autobiographical memory systems record everything that happens in the body, for example the food we eat. We also have a rote system that recalls information. These systems are motivated by rewards and punishments. As such, meaningful and meaningless information is managed and stored separately. The only way that people can receive this much information effectively is by learning to understand.

10. The brain understands and remembers best when reality and abilities are embedded in natural spatial memory.

Our mother tongue is learned through multi interactive experiences. It is shaped by internal processes and social interactions. Complex subjects can be understood easily when they occur in real experiences.

11. Learning can thrive by challenges and thwarted by threats. The brain can learn optimally and create maximum connections when it takes up challenges.

On the other hand, the brain becomes inflexible and reverts to primitive behavior when under threat. Educators must organize and create a relaxed learning atmosphere, involving as few threats as possible, and as many challenges as possible.

12. Each brain is unique.

We all have the same brain system, yet we are all different. Choice, variation, and multi-sensory processes are fundamental to brain-based learning.

4. Concept of Brain Based Learning

Craig suggested a number of concepts used to implement Brain Based Learning, as follows[27]:

a. In the orchestrated immersion phase (creating a learning environment that challenges students' thinking abilities)

The orchestrated immersion phase is focused on making learning subjects more meaningful and lasting in students' memories. This phase helps students make patterns and associate with their respective brains when they are given problems that are rich in learning experiences, so that the learning they get will last more in the students' memory. In every learning activity it is necessary to provide questions of subject matter that facilitate students' thinking abilities. The lesson questions are packaged as attractive and attractive as possible, for example through puzzles, simulation games, and so on so that students can get used to developing their thinking skills in the context of empowering students' brain potential[28].

b. In the relaxed alertness phase (creating a pleasant learning environment)

For the relaxed alertness phase, students are challenged to solve a problem well but minimize the threat they get if they can't do their best, because learning outcomes are higher when someone is comfortable without being threatened[29]. Learning can be varied by bringing students to study outside the classroom at certain times, accompanying learning activities with music that is designed appropriately as needed in class, learning activities with group discussions interspersed with interesting games, and other efforts to eliminate students feel uncomfortable.

c. In the active processing phase (creating an active and meaningful learning situation for students)

The active processing phase is carried out by forming study groups that facilitate students so that students are able to absorb information well, but students must still be rewarded even though their performance results are not optimal[30]. Students as learners are stimulated through learning activities to be able to build their knowledge through an active learning process that they do themselves. Build learning situations that allow all members of the student body to do their activities optimally, for example, the students 'eyes are used for reading and

[27] Retno Suharno, 'Brain Based Learning', *Retno Suharno* (blog), 16 February 2017, http://retnosuharno.blogspot.com/2017/02/brain-based-learning.html.
[28] Sapaat, 'Brain Based Learning', n.d., http://matematika.upi.edu/artikel/brain_based.html.
[29] Sapaat.
[30] Ozden, M and Ozden, M, 'The Effects of Brain-Based Learning on Academic Achievement and Retention of Knowledge in Science Course', 1, 12 (2008), http://ejse.southwestern.edu/volumes/v12n1/articles/art1-ozden.pdf.

observing, the students' hands move to write, the students 'feet move to take part in the games in learning, the students' mouths actively ask questions and discuss, and other productive activities of the body.

In science learning that uses the Brain Based Learning model, teachers are required to be able to connect one knowledge to another, because this step makes student learning more meaningful and makes students feel interested in learning[31]

5. The Advantages Of The Brain-Based Learning Model

The advantages of the brain-based learning model include[32]:

1. Give a new thought about how the brain works.
2. Pay attention to the natural work of the learner's brain in the learning process.
3. Create a learning climate where learners are respected and supported.
4. Avoid focusing on the work of the brain.
5. Can use various models in the learning process.

Another expert noted that brain based learning strategy will effort some benefit as follows[33]:

1) Provide Opportunities to Apply Learning
When you provide students with opportunities to apply learning -- especially through authentic, personally meaningful activities -- and then provide formative assessments and feedback throughout a unit, facts move from rote memory to become part of the memory bank.

These opportunities activate the isolated small neural networks of facts or procedures, which then undergo the cellular changes of neuroplasticity that link them into larger neural circuits of related information. These extensive neural circuits integrate new information when they are a) simultaneously activated and b) when they recognize patterns in common.

The expanding of related categories of information (Piaget's schema) through executive function activities will consolidate learning into networks. These networks can be activated when students are prompted to use new learning to solve problems or create new products. This is the transfer process that

[31] Ozden, M and Ozden, M.
[32] Rizki Siddiq Nugraha, 'Model Pembelajaran Brain-Based Learning', *Tinta Pendidikan Indonesia* (blog), accessed 16 August 2019, http://www.tintapendidikanindonesia.com/2018/06/model-pembelajaran-brain-based-learning.html.
[33] 'Three Brain-Based Teaching Strategies to Build Executive Function in Students', Edutopia, accessed 18 January 2021, https://www.edutopia.org/blog/brain-based-teaching-strategies-judy-willis.

further promotes network activation with the resulting neuroplasticity to construct long-term memory. Without these opportunities for strengthening, any memories learned by rote are simply pruned away from disuse after the test.

2) Introduce Activities to Support Developing Executive Function

Students need to be explicitly taught and given opportunities to practice using executive functions such as how to learn, study, organize, prioritize, review, and actively participate in class. Activities that can support executive function network development include comparing and contrasting, giving new examples of a concept, spiraled curriculum, group collaboration, open-ended discussions. Additionally, executive function is developed when students summarize and symbolize new learning into new formats, such as through the arts or writing across the curriculum.

Authentic, student-centered activities, projects, and discussions will give students the opportunity to do the following:

1. Make predictions
2. Solve a variety of types of problems
3. Pursue inquiries
4. Analyze what information they need
5. Consider how to acquire any skills or knowledge they lack to reach desirable goals

This type of student-prompted information and skill seeking strengthens students' attitude about the value of learning. When motivated to solve problems that are personally meaningful, students apply effort, collaborate successfully, ask questions, revise hypotheses, redo work, and seek the foundational knowledge you need them to learn. And they do this because they want to know what you have to teach.

When students acquire desired facts, skills, or procedures to achieve authentic, valued goals, the information has a template (neural circuit) to which it can link. Foundational knowledge is not isolated. Learning is consolidated into related patterns, connected in neural networks of long-term conceptual memory, and available for retrieval and transfer to solve future problems and investigate new ideas.

3) Model Higher Thinking Skills

In planning instruction, consider how and when you will model these higher thinking skills and provide opportunities for students to activate their developing executive function networks throughout the learning process.

6. Weaknesses Of The Brain-Based Learning Model

The weaknesses of the brain-based learning model include:

1. Education personnel in Indonesia do not fully know about brain-based learning theory.

2. It takes a lot of time to understand / learn how the brain works.
3. Requires a lot of money to create good learning for the brain.
4. Requires adequate facilities.

6. Tips In Teaching English By Using Based Brain Learning

1. Set a positive tone from the beginning

Often, students must feel physically and emotionally safe in the classroom for real learning to take place. By creating a positive classroom environment where students feel supported and encouraged, you'll open up the doors for your students to learn the best.Welcoming your students in class each day can increase student engagement, and many educators have found that setting a positive tone at the beginning of the day with classroom greetings creates a sense of community. Learn about why welcoming your students to class every day is important in our blog post.

2. Establish "Turn And Talk" Time

When students talk about concepts they've learned, they're more likely to retain the information. Implementing "turn and talk" time into your lessons can help students process what they've just read, discuss ideas before sharing them with the class, and clarify problems they may have had while completing homework. This strategy can be implemented as a warm-up activity, during class discussions, or as a closing activity to round out the day. Check out the video below to see how one middle school science teacher uses "turn and talk" time to help his students discuss their ideas.By letting your students discuss their ideas, you're giving them a chance to describe what they've learned in their own words and helping them explain their thoughts to their classmates. The Teacher Toolkit has great resources on this practice to help you get started. Utilizing the raise hand feature in most video conferencing platforms to make this more organized if you're teaching virtually.

3. Incorporate Visual Elements

Many people are visual learners who absorb and recall information best by seeing. You probably already have posters and visuals in your classroom or in your background if you are teaching remotely, but are they helping your learners? These eight strategies from TeachThought are designed to help you optimize the visuals in your classroom to appeal to your students.In a virtual setting, providing additional context to lessons with visual elements, such as breaking up your slides with a GIF that calls students' attention back during a lecture or finding a quick video of the science concepts you are discussing, are simple ways to hold student interest remotely. Changing out your Zoom background to align with the theme of your lesson or wearing a silly hat or decorative necktie are other fun

ways to incorporate visual elements into your teaching.

4. Break Learning Into Chunks

Chunking, or breaking down difficult or large pieces of text into smaller pieces, has been proven to help students identify key words and phrases, paraphrase, and understand the text in their own words. By breaking down a large piece of text into more manageable pieces, students are able to better understand and comprehend the material. The video below from Sprouts does a great job at explaining the concept of chunking.

Chunking can also be used to break down pieces of your instruction into smaller, manageable pieces. Work through lengthy instructions step by step with your students to help them understand each piece of what is being asked of them.

5. Get moving

Brain breaks are a great way to get your students up and moving, and they have been shown to increase brain activity. You're probably already familiar with how fidgety your students can get when sitting at their desks for long periods, so incorporating some movement into the day can help. Luckily, brain breaks are easy to implement in any classroom setting, and they require almost no setup. Check out this fun song below for an example of what a brain break could look like in your classroom.

F. CONCLUSSION

Every students have huge potentiality to learn English maximally. The students will be a great English user if the know and they realize their brain potential. Students has the ability to use the language innately. Its already in there since they were born in the world. It's the same with human ability to move to defense and soon. And so the teacher has the responsibility to endorse their brain to absorb the language enormously like a sponge. Give them the information connect the information until it linked and stays forever in their brain.

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