INCREASING READING COMPETENCE THROUGH BRAIN BASED LEARNING STRATEGIES IN ELT CLASSES

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Abstract:

Reading competence is one of the main foreign language learning skills in English language teaching. All students who learn reading in ELT classes need motivation, and there are different methods of motivating students in reading classes. Brain-compatible learning and teaching is one of the most useful strategies in English language education. This paper deals with brain based learning strategies in reading classes. Brain based learning strategies will be examined and brain based learning theory will be highlighted. Sample activities and exercises will be given, and useful websites and books will be suggested.

Keywords: Brain based learning strategies; Brain based learning theory; sample classroom activities

1. Introduction

Language learners must be motivated effectively to gain all language skills such as reading, writing, speaking and listening. Reading competence is one of the fundamental skills which a language learner should always develop. As it is generally known, there are lots of methods and approaches which can be used in language teaching and learning. In recent years, new methods and approaches have been developed to be used. Brain- compatible teaching is not a new method, but new techniques and approaches have been developed with the help of this method.

This study is based on the classroom observations of my own teaching situation to answer the question; "*How can I make my class hours more joyful in order to make*

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students more active and talkative during their reading classes?" I tried to jazz up my classes to increase my students' reading skills.

2. Theoretical Background

2.1 Brain-Compatible Teaching and Learning

As Haley (2010:8) indicates:

> *"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. In other words, we must understand the reasoning behind our teaching."*

2.2 Brain-Compatible Theories of Teaching and Learning

A. Gardner's Theory of Multiple Intelligences

According to Howard Gardner, there are eight intelligences; these can be listed as: bodily/kinesthetic, interpersonal/social, intrapersonal, intro perspective, logical/ mathematical, musical/rhythmic, naturalistic, verbal/linguistic, and visual/spatial. (Haley, 2010: 8).

Teachers and professors should always pay attention to identifying students' individual intelligences and it should be recognized that they display them to varying degrees and that these change overtime. Students must never be stereotyped. If teachers spend enough time to learn about their student's backgrounds such as their language, culture, literature etc., they can also learn the strengths and weaknesses of their various intelligences (Haley, 2010: 10).

Because there are always different kinds of learning styles in classrooms and, indeed, everywhere in the world, it is fundamentally important to realise the different learning styles as a classroom teacher or a professor. The following activities and characteristics on multiple intelligences have been suggested by Haley (2010:12):

Intelligence	Activities	Characteristics
Verbal/Linguistic	Creative writing/journal writing. Storytelling. Oral debate/ Presentations reading	Understands order and meanings of words. Explains and teaches well. Demonstrates memory and recall.
Musical/Rhythmic	Jazz chants. Music composition. Singings/humming. Musical performance.	Does well in drama, aerobic alphabet/exercise, Rhythm and percussion activities, mime, and sports. Can discern tones and pitch.
Logical/Mathematical	Using graphic organizers. Formulas/number sequences. Pattern games. Problem solving. Deciphering codes.	Enjoys abstract pattern recognition or inductive/ deductive reasoning. Discerns relationships. Does complex calculations.
Visual/Spatial	Painting/drawing. Patterns and Designs. Using various forms of multimedia. Sculpture/ pictures. Mind mapping.	Creates graphic representations, image manipulation, mental pictures. Displays active imagination
Bodily/Kinesthetic	Dancing, acting, running. Playing sports. Processing knowledge with body motion.	Enjoys dancing. Role plays. Likes drama. Does well in sports. Prefers to use manipulatives.
Naturalist	Drawing or photographing a natural setting. Describing changes in the local environment. Planning a campaign which focuses on endangered animals.	Enjoys flora, fauna, and other natural phenomena. Appreciates impact of nature on self and self on nature.
Intrapersonal/Introspective	Silent reflection. Thinking strategies. Complex guided imagery. Self-paced independent work.	Relates to inner states of being. Self-reflective. Is aware and can express feelings. Displays higher-order thinking/ reasoning.
Interpersonal/Social	Giving/receiving feedback. Cooperative learning. One-to-one communication. Group projects.	Discerns underlying intentions, behavior and perspectives of another. Works cooperatively in groups. Is sensitive to others' feelings, moods, and motives. Excels in verbal/nonverbal communication skills.

2.3. Learning Styles

Multiple intelligences and learning styles share certain characteristics, but they must be distinguished from one another, because it is believed that intelligences are determined at birth, whereas learning styles can usually be taught, depending on the learners' attitude and motivation toward the subject matter. (Haley, 2010:11)

Pashler, McDaniel, Rohrer and Bjork (2008:109) state that;

"…the notion of learning style as a set of preferences and the notion of learning style as a specific aptitude are very closely intertwined in many discussions of learning styles. Moreover, it is our impression that among the general public, the notion of learning styles and the notion of differential abilities are scarcely distinguished at all. There is, after all, a commonsense reason why the two concepts could be conflated: Namely, different modes of instruction might be optimal for different people because different modes of presentation exploit the specific perceptual and cognitive strengths of different individuals, as suggested by the meshing hypothesis. Similar to the learning-styles hypothesis, the idea of specific abilities also implies a special form of crossover interaction. However, the interaction is different in kind from what was outlined earlier as the key test of the learning-styles hypothesis."

Šabatová further illustrates this (2008: 15):

"In order to understand the theory of learning styles it appears to be logical to start from individual differences. Of course, the history of learning styles is closely connected with the history of individual differences or individualities. More precisely, the term "learning style" could have been subsequently developed from the term "individual difference". Thus, we can say that the individual difference could be a basis of today's concept of learning style."

Mobbs (2003) illustrates thus:

"A learning style is a preferential mode, through which a student likes to master learning, solve problems, thinks or simply react in a pedagogical situation.
The concept of learning style is used to describe individuals differences in the way people learn. Each person has a unique way to absorb and process experiences and information."

Moreover, Mobbs (2003) states that;

"Learning Styles were developed by Peter Honey and Alan Mumford, based upon the work of Kolb, and they identified four distinct learning styles or preferences: Activist, Theorist; Pragmatist and Reflector. These are the learning approaches that individuals naturally prefer and they recommend that in order to maximise one's own personal learning each learner ought to:

- *understand their learning style*
- *seek out opportunities to learn using that style"*

The characteristics of the four learning styles have been summarized in the following table, according to Mobbs (2003):

Learning style	Attributes	Activities	VLE Opportunities
Activist	Activists are those people who learn by doing. Activists need to get their hands dirty, to dive in with both feet first. Have an open-minded approach to learning, involving themselves fully and without bias in new experiences	• brainstorming • problem solving • group discussion • puzzles • competitions • role-play	• Interactive learning • Group work opportunities • Communication and virtual classroom (Chat)
Theorist	These learners like to understand the theory behind the actions. They need models, concepts and facts in order to engage in the learning process. Prefer to analyse and synthesize, drawing new information into a systematic and logical 'theory'	• models • statistics • stories • quotes • background information • applying theories	• Concentrate on concepts and theories presented in a variety of ways • Discussion groups could facilitate more thorough debate around theories than in a time-limited seminar
Pragmatist	These people need to be able to see how to put the learning into practice in the real world. Abstract concepts and games are of limited use unless they can see a way to put the ideas into action in their lives. Experimenters, trying out new ideas,	• time to think about how to apply learning in reality • case studies • problem solving • discussion	• Interactive learning • Problem-based learning

	theories and techniques to see if they work		
Reflector	These people learn by observing and thinking about what happened. They may avoid leaping in and prefer to watch from the sidelines. Prefer to stand back and view experiences from a number of different perspectives, collecting data and taking the time to work towards an appropriate conclusion	• paired discussions • self-analysis questionnaires • personality questionnaires • time out • observing activities • feedback from others • coaching • interviews	• Problem-based learning • Presentation of content from a variety of perspectives • Discussion groups allow asynchronous communication - time to reflect before contributing

3. Method

3. 1. 1. Participants

The participants consisted of 120 university students at Dokuz Eylul University in the city of Izmir in Turkey. Their ages ranged from 19-23.

3.1.2. Teaching Procedure

The participants were asked to reply to the following questions during the 1st and the 2nd weeks of their courses:

1. Do you like listening to music while studying English?
2. Do you like drawing pictures?
3. Do you like taking photos?
4. Do you like acting and dancing?
5. Do you like using the internet?
6. Do you like using your mobile phone for learning English?
7. Do you like cooking?
8. Do you like travelling?
9. Are you an optimist or a pessimist person? Why?
10. Do you live alone or with your family?

According to the answers of the questions asked, different classroom activities and methods were used to motivate students during class hours.

3.2 Sample Class Activities
Sample Class Activity to Improve Vocabulary Knowledge (Haley, 2010: 160)

3.2.1 Directions

1. Students were assigned a different vocabulary word.
2. During the class hours, students wrote down other words they heard or read that helped them describe their vocabulary word.
3. In the other box, a picture of what the word reminded them of or looked like in their mind was drawn by the students.
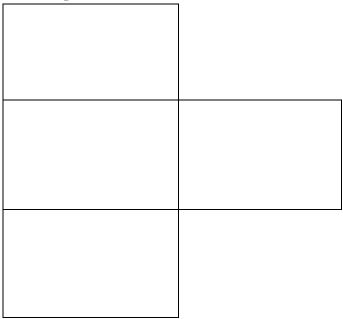
Vocabulary Word

Words to Describe Your Word	Draw a Picture

3.2.2 Sample Activity for the Pre-Intermediate Level of Students

Directions: Students filled each link with jobs that were interdependent and gave reasons why they needed each other. (Haley, 2010: 155)

Interdependence Chains

3.2.3 Sample Activity for the Upper Intermediate Level of Students

Directions: The following passage was one of the reading passages read by my students (at Dokuz Eylul University in Izmir, Turkey) during the 2013-2014 academic year and during the 2016-2017 academic year. (Campbell & Tennant, 2011:27):

Magical & mysterious places

"Does Utopia exist? What about Shangri-La, Atlantis and El Dorado? Let's start with Utopia. The word Utopia was invented by Sir Thomas More who used it as the title for a book he wrote in 1516. In the book, he described a fictional island in the Atlantic Ocean. Since then the word has been used to describe a society in which everything is perfect: in other words, a place that couldn't possibly exist.

Shangri-La is another fictional place that started life in a book. The book was 'Lost Horizon' by the British author James Hilton. Published in 1933, Hilton described a mystical valley where people aged more slowly and lived longer. People continue to use the term Shangri-La to refer to a heavenly place. Although the valley in Hilton's book is fictional, some places in the Buddhist Himalaya between northern India and Tibet have claimed to be the location for the story.

Atlantis was an island first mentioned in Plato's Timaeus and Critias. According to Plato's dialogues, Atlantis was destroyed by an earthquake or other natural disaster about 9, 000 years previously. Plato's characters say it was situated somewhere outside the Pillars of Hercules, although most believers think the Atlantic Ocean or Antarctica. Wherever it is or isn't, the idea of this lost civilization continues to inspire and intrigue us.

El Dorado was the name of a tribal chief who covered himself with gold dust and then dived into Lake Guatavita situated in Colombia. The ritual became the basis for the legend of El Dorado which told of a lost city of gold. The possibility of finding gold in this lost city attracted many explorers including Francisco Orellana and Gonzalo Pizarro who, in 1541, set off on an expedition to find their fortune. They didn't find the city, but Orellana 'discovered' the Amazon River. They were followed many years later by Sir Walter Raleigh who was also unsuccessful in his attempt. Since then the name El Dorado has been used to describe anywhere that money can be found quickly."

Before the activity:

I asked my students to do skimming and scanning on the passage they would read.

Teaching Procedure:

Step 1: Students read a text, entitled "Magical & mysterious places" from their workbooks.

Step 2: Students in my class answered the following exercises: (Campbell& Tennant, 2011: 26)

Magical & mysterious places

1. Which of these 'places' have you heard of? What do you think they have in common?

Utopia	Shangri-La	Atlantis	El Dorado

2. Read the article. Then match the places with their 'locations'.

1. Utopia a. South America
2. Shangri-La b. the Atlantic Ocean
3. Atlantis c. the Mediterranean Sea
4. El Dorado d. Asia

3. Put the words into the table, according to which legendary they refer to.

earthquake	easy money	expedition	fictional island
longer life	lost city of gold	lost civilization	
mystical valley	natural disaster	perfect society	tribal chief

Utopia	
Shangri-La	
Atlantis	earthquake
El Dorado	

4. Read the article to check your answers to exercise 3.

5. Complete the quotes with one of the names: Utopia, Shangri-La, Atlantis, El Dorado.

- *'Since ---------------------------- is the city of gold, there might be, of gold nuggets, an entire temple of gold.' (The Road to ---------------------------------------)*
- *'It's the death of a whole culture and a whole heritage. It's like the city of ----------------' (Mary Bowen)*
- *'Everybody has their own ideas of ---------------- … I tried to teach myself to enjoy the present, enjoy the now.' (Mark Knopfler)*
- *'A map of the world that does not include ---------------------------- is not worth even glancing at, for it leaves out the one country at which Humanity is always landing.' (Oscar Wilde)*

6. Answer the questions in your own words.

- *Can you think of a modern-day equivalent to El Dorado?*
- *If they did exist, which of the places would you most like to visit? Why?*
- *Describe your 'Shangri-La.'*

Step 3: I read the reading passage loudly twice to my students. I also asked them if there were any new words for them in that passage. I explained the definitions of the new words in that passage.

3.3.3. Objectives

1. To give students the chance to practice English as much as possible
2. To teach students new words while they are reading the new passages
3. To teach students the pronunciations of the new words effectively
4. To encourage students to participate in role-playing activities
5. To encourage students to join in group and pair-work discussions during class hours
6. To encourage students to answer the questions of the exercises on reading passages to increase their fluency in English
7. To encourage students to be more positive and optimistic while learning English
8. To help students to increase their thinking skills while attending pair work or group work discussions

3.4. Findings

3.4.1. Data Analysis

According to the answers of the questions which were asked during the 1st and the 2nd weeks of the courses students had attended, the following results were found:

- 120 students indicated that they liked listening to music while studying English
- 110 students indicated that they liked drawing pictures
- 110 students indicated that they liked taking photos
- 115 students indicated that they liked acting and dancing
- 120 students indicated that they liked using the internet
- 110 students indicated that they liked using their mobile phones for learning English
- 100 students indicated that they liked cooking
- 120 students indicated that they liked travelling
- 110 students informed that they were optimist students
- 100 students informed that they lived alone in Izmir during the academic year

3.4.2 Students' Attitudes

Classroom applications in this study were conducted in 3 different classes in the English Preparatory Classes Department at Dokuz Eylul University in the city of Izmir in Turkey during the 2013-2014 academic year and during the 2016-2017 academic year.

In each of these classes, there were Turkish university students from different faculties at Dokuz Eylul University. Students accepted increasing reading competence would be useful for their professional developments. They enjoyed reading English passages, jokes and dialogues from different sources. They also liked using the internet and Google for their studies.

3.4.3 Students' Perceptions

120 students found the teaching tasks very useful and they realised that they consistently improved their reading and communication skills. They regularly participated in pair work and group work activities during the class hours and informed me that their interests and motivation increased on a daily basis. Accordingly, the students' accuracy and fluency in English also improved rapidly.

4. Conclusion

Reading comprehension is one of the basic skills in English language learning. There are lots of approaches and methods to motivate our students in reading classes. Brain-compatible teaching and learning is one of the essential methods in contemporary English language teaching classes. Students have the opportunity to learn new things according to their tastes and likes with the help of the brain-compatible teaching methods.

In this paper, brain compatible teaching and learning has been examined, as has Gardner's theory of multiple intelligences. Learning styles and the characteristics of the four learning styles have been summarized, with sample classroom activities suggested for each. It is hoped that this study will help my colleagues to do more enjoyable courses. It is also hoped that students in the ESL or ELT classes will get more benefits with this study.

4.1 Discussion Questions for Teachers or Professors

1. Do you think Gardner's theory of multiple intelligences will help you to teach English better in your classes?
2. Do you think increasing reading competence with the help of the brain-compatible teaching strategies will help your students to be more fluent in English?
3. Do you think students who learn Basic English in the pre-intermediate level classes can get benefits if they are asked to do exercises according to their multiple intelligences?
4. What are the attributes of your students in learning or improving English?

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Appendix 1
Links for Multiple Intelligences Theory and Applications

1. Multiple Intelligences Research Study (MIRS). Retrieved 22 November 2017 from:
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