



THE POSITIVE EFFECTS OF COGNITIVE LEARNING STYLES IN ELT CLASSES

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Abstract:

In the EFL, ESL, ESP and in the ELT classes, students are taught their courses with different kinds of methods and approaches. Cognitive learning styles are the most essential styles in foreign language education. In this paper, the positive effects of cognitive learning styles will be handled. The benefits of these styles will be highlighted. Games on cognitive learning styles will be explained. Sample classroom activities will be shared. Useful books, videos and websites on cognitive learning styles will be suggested.

Keywords: cognitive learning style, games, books, videos and websites

1. Introduction

As it has been stated by Pashler, McDaniel, Rohrer and Bjork (2008:109) 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 common-sense 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.”

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However, the interaction is different in kind from what was outlined earlier as the key test of the learning-styles hypothesis.”

In our modern and contemporary world, most of the teachers and professors in different schools and universities use different kinds of methods to teach English in their classes. This study deals with the students and educators who like using the cognitive learning styles while learning or teaching English as a foreign language or as a second language in their classes.

2. Theoretical Background

2.1 What is Cognitive Learning?

As Eggen and Kauchak (2010) indicate:

“Cognitive views of learning evolved, in part, because behaviorism was unable to explain complex phenomena such as language learning and problem solving as well as a number of everyday events, such as why people respond differently to the same stimulus.

Cognitive learning theory assumes that learners are active in their attempts to understand the world, new understanding depends on prior learning, learners construct understanding, and learning is a change in people’s mental structures instead of changes in observable behavior.”

It has been mentioned by Schneider and Stern (2010:69):

“The cognitive perspective on learning is based on the assumption that knowledge acquisition lies at the very heart of learning. Once children acquire new information in learning environments, they are supposed to use that information in completely different situations later in life. This is only possible if they have understood it correctly and stored it in a well-organised manner in their long-term memory.

Cognitive research on learning has the goal of uncovering the mechanisms underlying knowledge acquisition and storage. Many of these mechanisms can be understood as transformation of information, similar to how a computer transforms data by means of algorithms.”

It has also been mentioned by Owen-Smith (2004:11):

“While ‘‘CAL’’ may be an unfamiliar cluster of letters to most individuals, the words from which the acronym is derived, Cognitive-Affective Learning, may be similarly strange even to those of us who are teachers. Of course, as teachers, we have been well socialized to value the cognitive but more times than not, we have also learned to ignore or marginalize the affective, the emotional, in teaching and learning. Some of us have been embarrassed by any attention to the affective in our students and in one another as if such attention diminishes our reputations as scholars. At best, those of us in higher learning have often treated the cognitive and the affective as separate spheres often relegating the emotional lives of students to Student Affairs and Campus Life offices.”

2.2 What are Cognitive Learning Styles?

As Lucas-Stannard (2003: 2) states that:

“To understand cognitive style, a definition of cognition must first be understood. Cognition is a collection of mental processes that includes awareness, perception, reasoning, and judgment. The study of cognitive processes has its roots in the Gestalt psychology of Max Wertheimer, Wolfgang Köhler, and Kurt Koffka and in the studies of cognitive development in children by Jean Piaget during the 19th century.”

It has been mentioned by Yang, Hwang and Yang (2012: 187):

“To deal with the relationship between cognitive and learning styles, researchers have indicated that cognitive styles could be classified as cognition centered, personality centered, or activity centered; moreover, learning style can be perceived as the activity-centered cognitive style (Sternberg & Grigorenko, 1997). From this aspect, learning styles are viewed as a subset of cognitive styles (Riding & Rayner, 1998; Sternberg & Grigorenko, 1997). Accordingly, this study employs cognitive styles in dealing with the adaptation of the learning environment, such as the navigation modes, whereas learning styles are used to deal with the presentation modes of multi-source materials that are composed of figures, videos and texts.”

Renzulli and Dai (2011) state that:

“Abilities address the question of whether one is capable of learning or performing specific cognitive tasks, interests address the question of what topic or subject one likes most, and cognitive and learning styles address the question of what are characteristic

ways one approaches learning tasks. Defined as such, styles reflect more generalized and pervasive aspects of personal functioning than do abilities and interests. In this sense, cognitive or learning styles should be distinguished from cognitive or learning strategies in that styles, as dispositions, are applied spontaneously across situations, whereas strategies can be conscious or unconscious decision and choice among alternative approaches in response to situational demands.”

2.3 Cognitive Responses to Persuasion

Greenwald states (1968: 149) that:

“There is, of course, an important extra-communication source of cognitive content in the persuasion situation: the cognitive reaction of the communication recipient to incoming persuasive information. When a person receives a communication and is faced with the decision of accepting or rejecting the persuasion, he may be expected to attempt to relate the new information to his existing attitudes, knowledge, feelings, etc. In the course of doing this, he likely rehearses substantial cognitive content beyond that of the persuasive message itself. The present hypothesis is, then, that rehearsal and learning of cognitive responses to persuasion may provide a basis for explaining persisting effects of communications in terms of cognitive learning. The learning of cognitive response content may, indeed, be more fundamental to persuasion than is the learning of communication content.”

Here, we understand that the role of the learning of cognitive response content is crucial in the persuasion situation. The cognitive reactions take important places in humans’ lives.

Greenwald also states (1968: 150-151) that:

“It is proposed that the persuasion situation is usefully regarded as a complex stimulus that evokes in the recipient a complex cognitive response. The essential dimensions of the recipient’s cognitive response are, at the least, (a) response content, i.e., degree of acceptance versus rejection of the position advocated in the communication, and (b) intensity, or vigor, of response. The latter dimension, as well as other possible dimensions of cognitive response, will not be considered further in this chapter. The essential components of the persuasion situation as a stimulus - that is, as determinant of the cognitive response content - are setting, source, and communication content. An additional major set of determinants of the cognitive response content is the set of characteristics brought by the recipient to the persuasion situation, including his existing repertory of attitude-relevant cognitions as well as personality traits and group memberships. As in many other treatments of persuasion,

the cognitive response analysis assumes that attitude change can be achieved by the modification, through learning, of the recipient's repertory of attitude relevant cognitions. Such modification might include strengthening of existing cognitions as well as introduction of new ones. The present emphasis on the mediating role of the recipient's own cognitive responses to persuasion may be formulated as an assertion that cognitive modification of attitudes requires active (not necessarily overt) rehearsal of attitude-relevant cognitions at a time when the attitude object or opinion issue is salient. Thus, the effects of persuasive communications might range from persuasion - when the recipient rehearses content supporting the advocated position-to boomerang-when the recipient rehearses content opposing the advocated position."

3. Method

3.1.1 Participants

The participants consisted of 90 (ninety) 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 their lessons:

1. What kinds of words are you interested in learning?
2. How do you search internet to find the new words you are looking for?
3. They were also asked to bring sentences according to the words they chose.
4. Do you like listening to music while studying English?
5. Do you like drawing pictures?
6. Do you like taking photos?
7. Do you like acting and dancing?
8. Do you like using the internet?
9. Do you like using your mobile phone for learning English?
10. Do you like cooking?
11. Do you like travelling?
12. Do you do any sports?
13. Are you an optimist or a pessimist person? Why?
14. Do you live alone or with your family?

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

a. Sample Class Activities:

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

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:

<u>Words to Describe Your Word</u>	<u>Draw a Picture</u>

b. 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

c. 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 (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.

a) "Since ----- is the city of gold, there might be, of gold nuggets, an entire temple of gold." (The Road to -----)

b) "It's the death of a whole culture and a whole heritage. It's like the city of -----"
-----" (Mary Bowen)

c) "Everybody has their own ideas of ----- I tried to teach myself to enjoy the present, enjoy the now." (Mark Knopfler)

d) "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.

a) Can you think of a modern-day equivalent to El Dorado?

b) If they did exist, which of the places would you most like to visit? Why?

c) 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.

3.1.3 Objectives

Time: 4 weeks

1. To give students the chance to practice English as much as possible

2. To teach students lots of new words which can be useful in the global world
3. To teach them how to use and pronounce them effectively
4. To teach them how to write paragraphs and compositions with the new words they learnt.

3.2 Findings

3.2.1 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:

- 90 students indicated that they liked listening to music while studying English;
- 80 students indicated that they liked drawing pictures;
- 80 students indicated that they liked taking photos;
- 85 students indicated that they liked acting and dancing;
- 90 students indicated that they liked using the internet;
- 80 students indicated that they liked using their mobile phones for learning English;
- 70 students indicated that they liked cooking;
- 90 students indicated that they liked travelling;
- 80 students informed that they were optimist students;
- 70 students informed that they lived alone in Izmir during the academic year.

3.2.2 Students' Attitudes

Students in my classes at Dokuz Eylul University in the city of Izmir in Turkey were respectful, dynamic and bright students. My students were interested in learning English as a foreign language and they were interested in developing and improving their language skills. All of the students in my classes accepted learning new words which could be used in the global world would be useful and enjoyable for their professional developments.

3.2.3 Students' Perceptions

Students in my classes at Dokuz Eylul University in the city of Izmir in Turkey found the teaching procedure very useful and they realised that they improved their language skills. They brought their compositions and homework papers regularly and informed me that their interests and motivation increased day by day. At the end of the term, the best compositions were put on the walls of their faculty and the best papers were awarded with some gifts. Students appreciated their own studies and the teaching procedure which was applied in their classes.

4. Conclusion

Up to here, the definitions of cognitive learning and cognitive styles have been given. The cognitive responses to persuasion have been highlighted. The teaching procedure which was applied in my classes has been explained. The results of the data analysis of this study have been shared. The students' attitudes and the students' perceptions in my classes at Dokuz Eylul University in the city of Izmir in Turkey have also been shared

There are lots of affective approaches and methods to motivate our students in our language classes. Cognitive 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 cognitive learning styles.

It is hoped that this study will help our colleagues to do more effective and enjoyable courses in their language classes. It is also hoped that all colleagues will have the opportunity to freshen up their knowledge on learning styles in language classes with the help of this study.

5. Discussion

5.1. Discussion Questions for Teachers or Instructors

1. Do you think cognitive learning styles will help you to teach English better in your classes?
2. Do you think increasing reading competence 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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References

1. Campbell, R. & Tennant, A. (2011). Reading: Magical & mysterious places. Upper Intermediate Global Workbook. p.p. 26-27. Oxford: Macmillan Education.
2. Eggen, P. and Kauchak, D. (2010). Cognitive Perspectives on Learning. Chapter 7: Cognitive Views of Learning. Pearson Education, Inc., publishing as Pearson Prentice Hall. Retrieved 30 September 2016 from: http://wps.prenhall.com/chet_eggen_education_6/0,8057,885470-,00.html
3. Greenwald, A. G. (1968). Cognitive Responses to Persuasion. Cognitive Learning, Cognitive Response to Persuasion, and Attitude Change1. Psychological Foundations of Attitudes. Academic Press Inc., New York. pp.149, 150-151. Retrieved 28 September 2016 from: faculty.washington.edu/~Gwald_PFOA_Ch6
4. Haley, M. H. (2010). Interdependence Chains. Brain-Compatible Differentiated Instruction for English Language Learners. p. 155. Boston, New York: USA. Pearson.
5. Haley, M. H. (2010). Word Chart. Brain-Compatible Differentiated Instruction for English Language Learners. p. 160. Boston, New York: USA. Pearson.
6. Lucas-Stannard, P. (2003). What is Cognitive Style? Cognitive Styles: A Review of the Major Theories and Their Application to Information Seeking in Virtual Environments. Bibliographic Essay Information Science, Dr. Froehlich. p.2. Retrieved 30 September 2016 from: <http://www.personal.kent.edu/~plucasst/Cognitive%20Styles.pdf>
7. Owen-Smith, P. (2004). What is Cognitive-Affective Learning (CAL)?. Journal of Cognitive Affective Learning, 1 (Fall 2004), 11. Retrieved 30 September 2016 from: https://cndls.georgetown.edu/teachtoconnect/resources/What_is_CAL.pdf
8. Pashler, H., McDaniel, M., Rohrer, D. and Bjork, R. (2008) What evidence is Necessary to Validate Interventions Based On Learning Styles?: Primary Mental Abilities: Relation to Learning Styles. Psychological Science in the Public Interest. p. 109. Volume: 9, No. 3. Retrieved 28 September 2016 from: http://www.psychologicalscience.org/journals/pspi/PSPI_9_3.pdf
9. Renzulli, J.S. and Dai, Y.D. (2011). Abilities, Interests and Styles as Aptitudes for Learning: A Person Situation Interaction Perspective. Cognitive-Learning Styles As Emergent Characteristic Modes of Information Processing. In: Sternberg, R.J.& Zhang, L (Edt.). (2011). Perspectives on Thinking, Learning and Cognitive Styles. Routledge. New York. Retrieved 28 September 2016 from:

https://books.google.com.tr/books?id=YMeQAqAAQBAJ&printsec=frontcover&hl=tr&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false

10. Schneider, M. and Stern, E. (2010). The Cognitive Perspective on Learning – an Introduction: Rationale and Assumptions underpinning the Cognitive Perspective Chapter 3. The cognitive perspective on learning: Ten cornerstone findings. In Organisation for Economic Co-Operation and Development (OECD) (Ed.), *The nature of learning: Using research to inspire practice* (p. 69). Paris: OECD. Retrieved 28 September 2016 from: http://www.educ.ethz.ch/pro/litll/Schneider_Stern_2010.pdf
11. Yang, Tzu-Chi, Hwang, Gwo-Jen and Yang Jen-Hwa (2012). Learning styles and cognitive styles. Development of an Adaptive Learning System with Multiple Perspectives based on Students' Learning Styles and Cognitive Styles. *Educational Technology & Society*, 16 (4), p.187. Retrieved 28 September 2016 from: http://www.ifets.info/journals/16_4/15.pdf

This study was presented at the The IJAS Conference which was organized by the International Journal of Arts & Sciences on the 23rd of June in 2015 at the Casa Convalescencia in Barcelona, Spain by the author of this paper.

APPENDIX 1

The following books can be used and suggested for the intermediate, upper-intermediate and advanced levels:

- Lindsay Clandfield and Rebecca Robb Benne and Amanda Jeffries.(2011). *Global Upper Intermediate Coursebook with eWorkbook Pack*.
- Lindsay Clandfield and Amanda Jeffries and Rebecca Robb Benne and Michael Vince (2012). *Global Advanced Coursebook with eWorkbook*.
- Marjorie Hall Haley (2010). *Word Chart. Brain-Compatible Differentiated Instruction for English Language Learners*. Boston, New York: USA. Pearson.
- Michael McCarthy Felicity O'Dell. (2005) *English Vocabulary in Use: Upper-intermediate*. 8th print. Cambridge University Press.
- Michael Vince& Paul Emmerson. (2003) *Intermediate Language Practice. English Grammar and Vocabulary*.
- Chambers Dictionary of Idioms. British National Corpus.
- Chambers Dictionary of Phrasal Verbs. British N National Corpus.
- Walter Pauk. (2000). *Six Way Paragraphs*. 3rd Edition.

APPENDIX 2

These videos can be suggested to watch to learn new things on cognitive learning:

- Cognitive Learning Theorists:
https://www.youtube.com/watch?v=_Sy8n5DRa7A
- A Cognitive Perspective on How People Learn: Implications for Teaching:
https://www.youtube.com/watch?v=cwaWHeyK_aM
- John Dunlosky -- "*Improving Student Success: Some Principles from Cognitive Science*": <https://www.youtube.com/watch?v=7KsC9CktCno>
- Exploring the Learning Experience Through Cognitive Science - [Debate WISE 2014]: <https://www.youtube.com/watch?v=I88ah1XjkD8>

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