

## Learning in English Grammar among Secondary School Students in Relation to Learning Styles

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### Abstract

The main objective of the present study was to find out the relationship between learning in English grammar and learning styles of secondary school students. To achieve this objective, English Grammar Achievement Test (EGAT) developed by the investigator and Learning Style Inventory (LSI) by Kolb (2007) were used. The sample consisted of 100 secondary school students selected randomly from Moga District of Punjab, India. The sample was equally categorized between Boys and Girls. The results revealed that there exists significant difference in the learning of secondary school students at different learning styles (Converger, Diverger, Assimilator and Accommodator). The students with accommodator learning style achieve high in English grammar and students with convergent learning style achieve low in English grammar. Further results show that there exists significant relationship between learning in English grammar and learning styles of secondary school students. It means that learning styles affects the learning in English grammar of secondary school students.

**KEYWORDS:** Learning in English Grammar, Learning Styles, Secondary School Students.

### Introduction

The English language plays a very important role in the National Curriculum (NC). Great demands are made of teachers at secondary schools to teach complex linguistic and grammatical concepts, as laid down in the national curriculum. For many English language learners, achievement of the expectations may require them to adopt new ways of learning and new ways of interacting with others. However, growth towards full linguistic and cultural competence in English should not be at the expense of student's own languages and cultures. A major goal of any instructional program for English language learners should be to encourage students to value and maintain their own linguistic and cultural identities so that they can enter the larger society as bilingual and bicultural individuals. Language learning success is associated with a range of factors including age, gender, motivation, intelligence, learning strategies and language learning styles. Learning styles are simply different approaches or ways of learning. In the present study Kolb's learning styles (converger, diverger, assimilator, accomodator) were used by the investigator.

### Learning

Learning occupies a very important place in human life. It is a cognitive process of acquiring knowledge or skill. It is a lifelong process. Learning is the acquisition of habits, knowledge and attitudes. It involves new ways of doing things, and it operates in an individual's attempt to overcome obstacles or to adjust to new situations. It represents progressive changes in behaviour. It enables him to satisfy interests to attain goals". Crow and Crow (1973).

Learning is also said to be equivalent to change, modification, development,

improvement and adjustment. It is not confined to school learning, cycling, reading, writing or typing but it is comprehensive term which leaves a permanent effect or impression on the individuals. It is acquiring new knowledge, behaviours, skills, values, preferences or understanding and may involve synthesizing different types of information. Learning plays a very important role in determining behaviour of an individual. It is relatively enduring change in behaviour which is a function of prior behaviour (usually called practice). Melvin and Marx (1971).

Human learning may occur as part of education, personal development or training. It may be goal oriented and may be aided by motivation. The study of how learning occur is part of neuropsychology, educational psychology, learning theory and pedagogy. Learning may occur as a result of habituation or classical conditioning seen in many animal species or as a result of more complex activities such as play seen only in relatively intelligent animals. Learning may occur consciously or without conscious awareness. It is the basis of success in life.

### **Learning Styles**

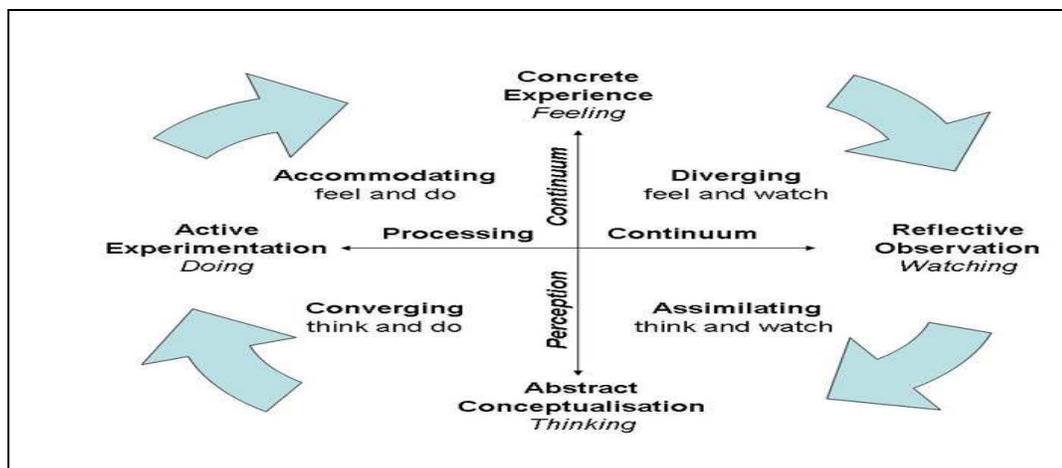
The way a person prefers to learn is called his/her learning style. It is a set of factors, behaviours and attitudes that facilitates learning for a student in a given situation (Reiff, 1992). There is no right or wrong/good or bad learning style. It has everything to do with the way a person's brain works to learn and store information efficiently. This approach to learning emphasizes the fact that individuals perceive and process information in very different ways. The learning styles theory implies that how much individuals learn has to do with whether the educational experience is geared towards their particular style of learning. It is the way people absorb, process and retain information. Learning styles are consistent orientations towards learning and studying.

### **Kolb's Learning Styles**

Kolb explains that different people naturally prefer a certain single different learning style. Various factors influence a person's preferred style. For example, social environment, educational experiences, or the basic cognitive structure of the individual.

Whatever influences the choice of style, the learning style preference itself is actually the product of two pairs of variables, or two separate 'choices' that we make, which Kolb presented as lines of axis, each with 'conflicting' modes at either end:

A typical presentation of Kolb's two continuums is that the east-west axis is called the **Processing Continuum** (how we approach a task), and the north-south axis is called the **Perception Continuum** (our emotional response, or how we think or feel about it).



**Figure-3 Kolb's Learning Styles**

Kolb believed that we cannot perform both variables on a single axis at the same time (e.g. think and feel). Our learning style is a product of these two choice decisions. It's often easier to see the construction of Kolb's learning styles in terms of a two-by-two matrix. Each learning style represents a combination of two preferred styles. The diagram also highlights Kolb's terminology for the four learning styles; diverging, assimilating, and converging, accommodating:

	Doing (Active Experimentation - AE)	Watching (Reflective Observation - RO)
Feeling (Concrete Experience - CE)	<b>Accommodating (CE/AE)</b>	<b>Diverging (CE/RO)</b>
Thinking (Abstract Conceptualization- AC)	<b>Converging (AC/AE)</b>	<b>Assimilating (AC/RO)</b>

**Table-1 Kolb's terminology for the four learning styles**

**Learning styles descriptions**

Knowing a person's (and your own) learning style enables learning to be orientated according to the preferred method. That said, everyone responds to and needs the stimulus of all types of learning styles to one extent or another - it's a matter of using emphasis that fits best with the given situation and a person's learning style preferences.

Here are brief descriptions of the four Kolb learning styles:

**1. Diverging (feeling and watching - CE/RO)**

These people are able to look at things from different perspectives. They are sensitive. They prefer to watch rather than do, tending to gather information and use imagination to solve problems. They are best at viewing concrete situations at several different viewpoints.

Kolb called this style 'diverging' because these people perform better in situations that require ideas-generation, for example, brainstorming. People with a diverging learning style have broad cultural interests and like to gather information. They are interested in people, tend to be imaginative and

emotional, and tend to be strong in the arts. People with the diverging style prefer to work in groups, to listen with an open mind and to receive personal feedback.

**2. Assimilating (watching and thinking - AC/RO)**

The Assimilating learning preference is for a concise, logical approach. Ideas and concepts are more important than people. These people require good clear explanation rather than practical opportunity. They excel at understanding wide-ranging information and organizing it in a clear logical format.

People with an assimilating learning style are less focused on people and more interested in ideas and abstract concepts. People with this style are more attracted to logically sound theories than approaches based on practical value.

This learning style is important for effectiveness in information and science careers. In formal learning situations, people with this style prefer readings, lectures, exploring analytical models, and having time to think things through.

**3. Converging (doing and thinking - AC/AE)**

People with a converging learning style can solve problems and will use their learning to find solutions to practical issues. They prefer technical tasks, and are less concerned with people and interpersonal aspects. People with a converging learning style are best at finding practical uses for ideas and theories. They can solve problems and make decisions by finding solutions to questions and problems.

People with a converging learning style are more attracted to technical tasks and problems than social or interpersonal issues. A converging learning style enables specialist and technology abilities. People with a converging style like to experiment with new ideas, to simulate, and to work with practical applications.

**4. Accommodating (doing and feeling - CE/AE)**

The Accommodating learning style is 'hands-on', and relies on intuition rather than logic. These people use other people's analysis, and prefer to take a practical, experiential approach. They are attracted to new challenges and experiences, and to carrying out plans.

They commonly act on 'gut' instinct rather than logical analysis. People with an accommodating learning style will tend to rely on others for information than carry out their own analysis. This learning style is prevalent within the general population.

**Review of related studies**

Results of studies by Garton, Dyer and King (2000), Cutulo and Rochford (2007), Uzuntiryaki (2007), Gallagher (2010), Tight (2010), Abidin, Rezaee, Abdullah, Kaur and Singh (2011), Chermahini (2013), Ren (2013), Rahmutallah (2013) and Maldonado (2014) showed that learning styles significantly impacted the students achievement in different subjects whereas studies by Yilmaz, Soylo and Akkoyunlo (2009), Hoeffner (2010), Sama (2011) and Ranu & Aulakh (2012) clarified that type of learning styles were not significantly effective on students achievement in different learning environments.

**Operational Definitions**

**Learning**

Learning is operationally defined as what a student is expected to know, understand or be able to demonstrate at the end of the experimental treatment. In the

present study, learning means the same as achievement in English grammar. It will be assessed by the mean scores obtained on the achievement test prepared by the investigator.

### **Learning Styles**

The way a person prefers to learn is called his/her learning style. This approach to learning emphasizes the fact that individuals perceive and process information in very different ways. Here learning styles measured by Kolb's Learning Style Inventory (2007) as converger, diverger, assimilators and accommodators.

### **Objectives**

The study was carried out with the following objectives:

1. To study the learning in English grammar of secondary school students.
2. To study and compare the learning in English grammar of secondary school students with respect to gender.
3. To study the learning styles of secondary school students.
4. To study the learning in English grammar of secondary school students at different learning styles.
5. To find out the relationship between learning in English grammar and learning styles of secondary school students.

### **Hypotheses**

The study was carried out with the following hypotheses:

1. There will be no significant mean scores difference in the learning in English grammar of secondary school students with respect to gender
2. There will be no significant mean scores difference in the learning in English Grammar of secondary school students at different learning styles (Assimilator, Accomodator, Converger, Diverger).
3. There will be no significant relationship between learning in English grammar and learning styles of secondary school students.

### **Delimitations**

The present study was carried out with the following delimitations:

1. The study was delimited to Moga District of Punjab.
2. The study was delimited to Government Secondary Schools of Moga District only.
3. The study was delimited to 9<sup>th</sup> class students only.
4. The study was delimited to 100 students only.
5. The study was further delimited to 100 boys and 100 girls.

### **Method**

Keeping in view the nature of the study, the descriptive research method was used in the present study.

### Sample

The present study was conducted on sample of 100 Government secondary school students of Moga District of Punjab, India. The sample was selected by simple random method of probability sampling. The sample was equally categorized between Boys and Girls.

### Tools used

1. Criterion referenced test measuring learning on selected topics of English Grammar of 9th class was developed by the Investigator.
2. Learning Styles Inventory (2007) by Kolb.

### Statistical techniques used

Statistical techniques viz. Mean, Standard Deviation (S.D.), Critical Ratio (t-test), F-Test and Co-efficient of Correlation (r) were used to analyse and interpret the collected data.

### Analysis and Interpretation

The results of the present study are elucidated as below:

**Table I Showing the Mean, Standard Deviation (S.D.) and 't' ratio of learning in English grammar of Boys and Girls of secondary schools.**

Group	N	Mean	S.D.	't'-value
Boys	50	24.78	7.26	1.98*
Girls	50	24.8	8.72	

\* Significant at 0.05 level

From Table I it is found that 't'-value of learning in English grammar of 50 Boys and 50 Girls is 1.98. Which is significant at 0.05 level of significance. Hence, there is significant difference in the mean scores of learning in English grammar of Boys and Girls of secondary school. Hence the Hypothesis, "There will be no significant mean scores difference in the learning in English grammar of secondary school students with respects to gender. " is rejected.

Again higher mean scores of girls further led to the conclusion that girls achieve high in English grammar as compare to the boys.

**Table II Showing the F value of learning in English grammar of secondary school students at different learning styles**

Learning Styles	N	Source of Variance	Sum of Squares	df	Mean Square Variance	Value of F
Assimilator		Between-	168.83	3	56.28	

Accommodator	100	Groups				2.87*
Converger		Within-Groups	1881.28	96	19.60	
Diverger						

\* Significant at 0.05 level

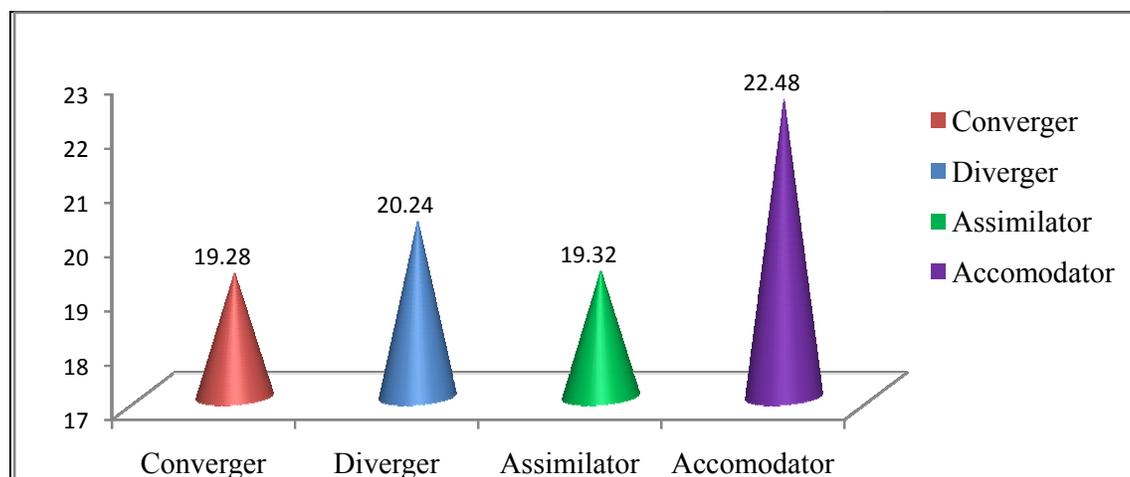
From Table II it is found that F-value of learning in English grammar of secondary school students at different learning styles is 2.87. Which is significant at 0.05 level of significance. Hence, there is significant difference in the mean scores of learning in English grammar of secondary school students at different learning styles. Hence the Hypothesis, "There will be no significant mean scores difference in the learning in English grammar of secondary school students at different learning styles." is rejected.

**Table III showing the Mean and S.D. of learning in English grammar of secondary school students at different learning styles.**

Learning Styles	N	Converger		Diverger		Assimilator		Accommodator	
		Mean	S.D.	Mean	S.D.	Mean	S.D.	Mean	S.D.
Learning in English Grammar	100	19.28	6.54	20.24	7.43	19.32	5.57	22.48	4.49

From Table III the mean scores of Converger, Diverger, Assimilator and Accommodator is 19.28, 20.24, 19.32 and 22.48 respectively and S.D. for the same is 6.54, 7.43, 5.57 and 4.49. On the basis of mean scores it is further concluded that students with Accommodating learning style achieve high in English grammar and students with Convergent learning style achieve low in English grammar.

**Figure-I showing the mean scores of learning in English grammar of secondary school students at Converger, Diverger, Assimilator and Accommodator Learning Styles**



**Table IV showing the coefficient of correlation between learning in English grammar and learning styles of secondary school students.**

S. No.	Group of Variables	N	'r'
1.	Learning in English Grammar	100	0.338**
2.	Learning Styles	100	

\*\* Significant at 0.01 level of significance

Table IV represents the co-efficient of co-relation between learning in English Grammar and learning styles of secondary school students. The value of co-efficient of co-relation (r) is 0.338. Which is significant at 0.01 level of significance. Hence there is significant relationship between learning in English grammar and Learning styles of secondary school students. Hence the hypothesis "There will be no significant relationship between learning in English grammar and learning styles of secondary school students." is rejected.

### Findings

- ❖ There exists significant difference in the learning in English Grammar of boys and girls. Girls show better learning in English grammar than boys.
- ❖ There exists significant difference in the learning in English grammar of secondary school students at different learning styles ( Converger, Diverger, Assimilator and Accommodator). The students with accommodator learning style achieve high in English grammar and students with converger learning styles achieve low in English grammar.
- ❖ There exists significant relationship between learning in English grammar and learning styles of secondary school students.

### Discussion of Results

In the present study the results reveal that there exists significant difference in the learning in English grammar of secondary school students with respect to different learning styles (Converger, Diverger, Assimilator and Accommodator). The students with accommodator learning style achieve high in English grammar as compare to Converger, Diverger and Assimilator. These results were supported by the study Esen (2007) who studied learning styles and high school student's achievement and found that there exists statistically significant difference among student's achievement with different learning styles. Further Rahmatullah and William (2013) also supported these results who studied effect of learning styles on scholastic achievement and found that there exists significant difference in the scholastic achievement of students at different learning styles.

In the present study the results also shows that there exists significant relationship between learning in English grammar and learning styles of secondary school students. These results were supported by the study of Abidin, Rezaee, Abdullah, Kaur and Singh (2011) who studied learning styles and overall academic achievement in a specific educational system and revealed that there exists a significant relationship between overall academic achievement and learning styles. Chermahini, Ghanbari & Talab (2013) also studied learning styles and academic performance of students in English as a second-language class in Iran and found significant relationship between the different learning styles and the performance in

an English test, and the performance resulted differently in four groups with different preferred learning styles. Maldonado (2014) in his study the relationship between Latino students' learning styles and their academic performance and revealed that student's academic performance is related to the way they learn.

It means that learning styles affects the learning in English grammar of secondary school students. If we prefer the learning style of the students their learning/achievement will increase.

### Conclusion

In the present study the investigator found that there exists significant relationship between learning in English grammar and learning styles of the secondary school students. Both learning in English grammar and learning styles directly proportional to each others. If we prefer the learning style of the students their learning will increase and vice-versa.

### Educational Implications

The following points highlights the educational importance of the present study:

- 1) These results could give immense help to researchers, guidance workers, teachers and school counselor to develop suitable methods of teaching of English grammar so that students can get more achievement in English grammar.
- 2) It could help the teachers to develop four fundamental skills which are Listening, Speaking Reading and Writing.
- 3) It could help the teachers and parents to know about the importance of learning styles in English grammar achievement.
- 4) With the help of these results teachers can make parents realize the importance of learning styles in the student's achievement.
- 5) These results will be very helpful for the parents to provide English environment into their homes.
- 6) More hard work could be done to improve the English achievement of boys.
- 7) These results could help the teachers to motivate students so that they can achieve high.
- 8) These results could be very beneficial in the harmonious development of the personality of the students.

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