Research Paper Education

A Study of Styles of Learning and Thinking in Relation to Creativity of High School Level Students

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ABSTRACT

For the effective teaching and strong student teacher relationship it is very important to teachers that they should have knowledge about Styles of Learning and Thinking. creativity also play very effective role in classroom behavior, by keeping in mind both factors in Present study researcher investigated the influence of Styles of Learning and Thinking on Creativity of high school students of Jabalpur. The population for the research includes English medium students of secondary class of different area.600 students was selected as sample for the study. Three way ANOVA statistical method is used for the results and interpretation .SOLAT test by D.Venkatraman for styles of Learning and Thinking and PTC Passi test of creativity were employed. Results show the significant influence of styles of Learning and Thinking on Creativity.

KEYWORDS Styles of Learning and Thinking, Creativity, Classroom behavior

INTRODUCTION-

Learning and Thinking style-

Learning style –It is the characteristic of the cognitive, affective, and physiological behaviours that serve as relatively stable indicators of how learners perceive, interact with, and respond to the learning environment .

Thinking style -The powers of thinking and reasoning may thus be considered to be the essential tools for the welfare and meaningful existence of the individual as well as society.

The education is the process of instruction aimed at the all round development of individuals, providing the necessary tools and knowledge to understand and participate in day to day activities of today's world. Good teaching practices were assumed to be universals that did not depend on individual differences among students or on teaching students to think and learn. teaching- learning process. We now have conceptual and practical information about the ways that students learn and how instructors can use this information to inform their teaching practices. Teaching-learning scholars have shown that it is the interaction of good instructional practices with students' strategic learning styles and skills that result in positive learning outcomes. To provide optimum learning experiences for design students, consideration must be given to individual differences among learners. By addressing students' learning and thinking styles and planning instruction accordingly, design educators will meet more individual's educational needs and will be more successful in their own educational goals.

The most effective teachers have deep knowledge of the subjects they teach, and when teachers' knowledge falls below a certain level it is a significant impediment to students' learning. As well as a strong understanding of the material being taught, teachers must also understand the ways students learn and think about the content, be able to evaluate the thinking behind students' own methods, and identify students' common misconceptions and he or she should have knowledge about styles of learning and thinking of their students.

Creativity- Much of the thinking done in formal education emphasizes the skills of analysis--teaching students how to understand claims, follow or create a logical argument, figure out the answer, eliminate the incorrect paths and focus on the correct one. However, there is another kind of thinking, one that focuses on exploring ideas, generating possibilities, looking for many right answers rather than just one. Both of these kinds of thinking are vital to a successful working life, yet the latter one tends to be ignored until after college.

A simple definition is that creativity is the ability to imagine or invent something new. As we will see below, creativity is not the ability to create out of nothing (only God can do that), but the ability to generate new ideas by combining, changing, or reapplying existing ideas. Some creative ideas are astonishing and brilliant, while others are just simple, good, practical ideas that no one seems to have thought of yet. Creativity is also an attitude: the ability to accept change and newness, a willingness to play with ideas and possibilities, a flexibility of outlook, the habit of enjoying the good, while looking for ways to improve it.

Objective of the study-

1) To study the influence of styles of Learning and Thinking on Creativity.

Hypothesis of the study-

1) There is no significant influence of Styles of Learning and Thinking on creativity.

Methodology- For this study normative survey method is used ,600 students of class 9th (300 girls,300 Boys) were the sample of the study. Three way ANOVA is used for the data analysis.

Tool Used – 1) SOLAT test by D. Venkatraman for styles of Learning and Thinking.

2) PTC Passi test of creativity by Dr.B.K.Passi

Analysis and Interpretation of data- firstly researcher administer the SOLAT test on the students of class ix and catagorised them in Right Brain, Left Brain and Whole Brain students. after that researcher employed PTC on those students .Interpretation of results are as follows,

Influence of styles of Learning and Thinking on Creativity.
Table No -1

Source of Variance	df	SS	MSS	F-Value	Remark
Style of Learning & Thinking	2	6918.94	3459.47	5.15	p<0.01

From Table -1, it can be seen that the F-Value is 5.15 which is significant at 0.01 level with df=2/588. It indicates that the mean scores of Creativity of Right, Left and Whole Brain stu-

dents differ significantly. So there was a significant influence of Style of Learning and Thinking on Creativity of students. Thus the null hypothesis that there is no significant influence of Style of Learning and Thinking on Creativity of students is rejected. In order to know which groups mean score of Creativity is significantly higher than other, the data were further analyzed with the help of t-Test and the results are given in Table.2.

Styles of Learning and Thinking-wise M, SD, N and t-Values of Creativity
Table No.-2

Style of Learning & Thinking	M	SD	N	Left	Whole
Right Brain	108.35	27.63	280	0.50	2.67**
Left Brain	98.81	23.22	197		3.05**
Whole Brain	109.53	26.57	123		

** Significant at 0.01 level

From Table.2, it can be seen that the t-value for Right & Left Brain is 0.50 which is not significant. It indicates that the mean scores of Creativity of students with Right and Left Brain did not differ significantly. It may, therefore, be said that students with Right and left Brain were found to be Creative to the same extent.

The t-value for Right Brain and Whole Brain groups is 2.67 which is significant at 0.01 level with df=401 (Vide Table.2). It indicates that the mean score of Creativity of students with Right and Whole Brain differ significantly. The mean score of Creativity of Right Brain students is 108.35 which is significantly higher than those of Left Brain students whose mean score of Creativity is109.53 . It may, therefore, be said that Whole Brain students were found to be significantly more Creative than those of Right Brain.

The t-value for Left Brain and Whole Brain groups is 3.05 which is significant at 0.01 level with df=318 (Vide Table.2). It indicates that the mean score of Creativity of students with Left and Whole Brain differ significantly. The mean score of Creativity of Left Brain students is 98.81 which is significantly lower than those of Whole Brain students whose mean score of Creativity is. 109.53 It may, therefore, be said that Left Brain students were found to be significantly less Creative than those of Whole Brain.

Results and Discussion- After Data Analysis results shows that Whole Brain students were found to be significantly more Creative than those of Right Brain, and Left Brain students were found to be significantly less Creative than those of Whole Brain. Results proved that the creativity is whole brain process.

Conclusion- the role of the right hemisphere is essential to the creative process. But it supplies only a quarter of the thinking needed to realize the full creative process. We also need the left hemisphere and both halves of the limbic system to optimize creative output. For example, an intuitive idea that pops into your mind and appears to solve a problem can be experimented with, visualized, integrated with other ideas and ultimately developed into a possible solution. That's the right hemisphere part. Now, to do something about that possible solution requires different specialized mental processes, and these, by and large, are located in the left hemisphere. The left brain/right brain concept of brain specialization was thoroughly researched and documented by the surgeon Joseph Bogen; Robert Ornstein, author of *The Psychology of Consciousness*; and Roger Sperry, the psychobiologist who conducted landmark "split brain" experiments, that earned him the Nobel Prize in medicine in 1981.

REFERENCES

1) Wadsworth, B. J. (2004). Piaget's theory of cognitive and affective development: Foundations of constructivism. Longman Publishing. 2)Appleton, Ken and Asoko, Hilary (1996). A Case Study of a Teachers' Progress Toward Using a ConstructivistView of Learning to Inform Teaching in Elementary science. 3)Banet, E., Nunez, F. (1997), "Teaching and learning about human nutrition: a constructivist approach",International Journal of Science Education, 4)Herrmann, N.(1996). The whole brain business book. New York: McGraw-Hill. 5) Bunderson, C. V. 1995. The validity of the Herrmann Brain Dominance Instrument, in Herrmann,N (ed) The creative brain. (2nd edition). Appendix A 337-379. USA: Quebecor Printing BookGroup. 6)Dentino, M.J. (2001). Learning styles and student academic performance in undergraduateonline business courses. DAI-A, 62(2), 435. 7)DeTure, M. (2004). Cognitive styles and self-efficacy: predicting student success in onlinedistance education. American Journal of Distance Education, 18(1), 21-38.