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Effect of the scientific thinking on the classroom performance among higher secondary class students

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ORIGINAL ARTICLE

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SUMMARY

The education is mental, moral and spiritual makeup of a student in the scientific thinking on the classroom performance specially effect which purposively to know the major category among pupil. A questionnaire is a systematic composition of question that are submitted For measuring the scientific thinking style the researcher used the developed by Dr. P.N. Singh & Dr. Ranjana Arora (BHU) this test is on validity & Reliability norms. This tool is prepared for the understanding of the nature of scientific knowledge among students. Finally the study was conducted to find out the effect of moral and development scientific thinking is giving significance different in classroom performance of higher secondary girl/boy pupil. And the creative, parsimonious, testable scientific thinking is giving no significant different between boy/girl group in higher secondary school.

Introduction—

Education is necessary for everyone's life. Without it a person is treated as animal and no place in society.

According to Dr. Rajendra Prasad

Mental, moral and spiritual make up of a student is in the long run of greater importance value than mere intellectual achievement.

Education is an indispensable element of human existence. It is a special effort as well as special performance of men. There is no age, no stage to receiving education (knowledge).

At every step of life an individual learns one thing or other on the basis of day to day experiences and all this is a part of education.

According to T. Raymont—

Education is the process of development in which consists the passage of human being from infancy to maturity, the process by which he adopts himself gradually in various ways to his physical, social, spiritual atmosphere.

Scientific thinking is a human activity engaged by most people it connects other form of thinking rather than cognitive affective and psychomotor.

To fully appropriate scientific thinking, it must be situated in development framework with a goal or identifying both origin and endpoint.

Scientific thinking adopted as knowledge seeking, this definition encompasses any purposeful thinking that has the objective of enhancing seeker knowledge.

Classroom performance —

It is the outcome of the education, the extent of the thinking to which student, teacher or institute has achieved their education goals.

Classroom performance is something pupil do or achieve their knowledge at school it does not include sport and music.

Performance encompasses student ability and achievement it is multimensional it is intricately related to human growth and cognitive, emotional, social, physical development. It reflect the whole child it is not related to the single instance but occurs across time and level through level of students life in public and at school classroom performance Related studies.

Any intensive study is incomplete without the related literature in accordance with the variable of the topic. The particular area of interest and relevant quantitative and qualitative analysis of this research is usually given to the investigator worker. it is very essential to every researcher to up to date in her information about the literature related to her own problem already done by other.

Melnerney, dennis m.cheng, Rebecca wing –yi : magaldelena mo ching lam (2012) find out the performance self concept in eng. Maths and learning strategies and their direction of effect on classroom performance of thousand student at secondary school. He concluded that self respect learning and strong strategy level have reciprocal relation with each other.

ZYCHINSKI' KRISTEN, K.POLO: (2012) made a study on the youth lower level of the performance. Research also indicates the youth consistently report higher level of depressive symptom.

PHLLIPSON, SIVANES, SHANE N(2012) find out the cognitive ability

Predict the performance in the youth with parental involvement and expectation form part of the constellation of factor predicts their child's behavior particular the family in the society.

ANANDMANI (2012) made a study on factor influencing academic achievement in the scientific thinking at secondary school level and found that gender of student had no significance relationship with the achievement of science. Scientific education status access to computer has positive impact.

PRAKASH, SUDHAMONI(2011) find out the performance depends on the variable such as instructional quality of school intelligence environment self concept self esteem adjustment teaching effectiveness. He concluded that teacher and parent played a big role to develop the need of high achievement in performance through encouragement being friendly with pupils.

RAMANA (1997) studied upon the classroom learning environment and its effect on the pupils. He found the performance for better learning and the teacher's opinion were positively correlated and major conclusion is that the environment of class is effect the students.

PURPOSE OF THE STUDY

Effect of the scientific thinking on the classroom performance among higher secondary class students.

Scientific thinking is most common phenomena in modern age because it developed the quality of the his/her thinking by skillfully and improving intellectual standard it is self directed, self disciplined, self monitored, self corrective it also develop the problem solving abilities as well as commitment to develop skills abilities and disposition.

OBJECTIVE-

Research without any aims and objective is just like a rudderless vessel in the deep sea.

1 To study the effect of the class room performance among higher secondary girls/ boys girl on moral scientific thinking

2 To study the effect of the classroom performance among higher secondary student on creative scientific thinking.

3 To study the effect of the classroom performance among higher secondary pupils on development scientific thinking

4 To study the effect of the classroom performance among higher secondary girls / boys on parsimonious scientific thinking

5 To study the effect of the classroom performance among higher secondary student on testable scientific thinking.

Hypothesis -

H1 There will be no effect of the classroom performance among higher secondary boys/girls on moral scientific thinking.

H2 There will be no effect of the classroom performance among higher secondary pupils on creative scientific thinking.

H3 There will be no effect of the classroom performance among higher secondary students on development scientific thinking.

H4 There will be no effect of the classroom performance among higher secondary girls/boys on parsimonious scientific thinking.

H5 There will be no effect of the classroom performance among higher secondary student on testable scientific thinking.

Delimitation

^ The present study deals with higher secondary student class 11.

^ The study is limited only 5 school affiliated by govt.

^ The study is limited to the Raipur area.

^ Only 100 pupil were chosen as sample for collecting the data which includes 20 student of each govt. school.

^ To collect the information of classroom performance by effect of scientific thinking at 4 govt. school were chosen.

^ The sample consists from boys and girls student of govt. higher secondary school.

Method —

Research is considered to be more formal, systematic and intensive process of carrying on a specific method of analysis.

It essentially includes objectives sampling research strategy tools techniques for analysis the data

Here the research design begins -

Selection of pupil at govt. school— boy/ girl student, Random selection on sampling of gender, Scientific thinking style questionnaire, Analysis using T test, Population

No. of school	Name of the school	No. of male student	No. of female student
1	Govt. H.s. dagania	10	10
2	Govt. H.S.Bhatagaon	10	10
3	Govt. H.S. Raipura	10	10
4	Govt. H.S. Kukurbeda	10	10
5	Govt. H.S. Sakharam	10	10

Tools — A questionnaire is a systematic composition of question that is submitted to a sampling of population from which information desired.

For measuring the scientific thinking style the researcher used the developed by Dr. P.N. Singh & Dr. Ranjana Arora

(BHU) this test is on validity & Reliability norms. This tools is prepared for the understanding of the nature of scientific knowledge among students.

Reliability— Using spearman brown properly formula for estimating reliability from two comparable halves of STSQ the reliability coefficient of the whole test was found to 0.896

Validity— It may be stated that the evidence of validity of a test accumulate in the course of its usage in different studies. the intrinsic validity was found to be 0.906

Statistical analysis — After the collection of data from the selected sample the scoring is done and then the raw score is recorded & subject to standard score "t" score to find the effect of scientific thinking on classroom performance of higher secondary school student

Formula used — mean (M)=x/n

Hypothesis 1— There will be no effect of classroom performance among higher secondary boys/girls on a moral scientific thinking. The mean of boy group of scientific thinking on classroom performance is 4.56 and that of girl group is 5.44. To find whether the difference is significant or not the 't' value is calculated which is shown here

Scientific thinking	Mean	SD	N	df	t	Result
Boy	4.56	1.81	50			Signify.
Girl	5.44	1.69	50	98	2.48	At0.05

Result- From the above table it is reveal that the calculated 't' value is 2.48 whereas the 't' value at df=98 by table is 1.98 at 0.05level of significance which is less than calculated value. There is no significance different among higher secondary boy/girl group on moral scientific thinking with respect of classroom performance.

Hypothesis 2— there will be no effect of the classroom performance among higher secondary boys/girl on creative scientific thinking

The boys group of scientific thinking of govt. higher secondary school student having mean in classroom performance is 3.12 and mean of girl is2.92.

To find the difference is significant or not,the 't' value is calculated which is shown as follows;

Scientific thinking	Mean	SD	N	df	t	Result
Boy	3.12	1.25	50			No signify
Girl	2.92	1.39	50	98	0.749	At0.05

Result- From the table it is reveals that the calculate 't' value is 0.749. Whereas the 't' value at df=98 by table is 1.98 at0.05 level of no significant which is more than calculated value. So there is no significance different between boy/girl groups of creative scientific thinking with respect to their classroom performance.

Hypothesis3— There will be no effect of classroom performance among higher secondary boy/girl on development scientific thinking.

The boys group of scientific thinking of Govt. H.S. school student having mean in classroom performance is 3.48 and mean of girl group is 2.72

To find the difference is significant or not. the 't'value is calculated which is shown as follow-

Scientific thinking	Mean	SD	N	df	t	Result
Boy	3.48	1.40	50			Signify
Girl	2.72	1.43	50	98	2.66	At0.05

Result- from the table it is reveal that the calculate 't' value is 2.66 whereas the 't' value at df=98 at0.05level of significant which is less than calculated value

So there is significant difference between boys/girl group of development scientific thinking with respect to their classroom performance.

Hypothesis 4- There will be no effect of classroom performance among higher secondary boy/girl on parsimonious scientific thinking.

The boy group of scientific thinking of Govt. H.S. school student having mean in classroom performance is 4014 and mean of girls group is 4.42. To find the difference is significant or not. The 't' value is calculated which shown here :

Scientific thinking	Mean	SD	N	df	t	Result
Boy	4.14	1.84	50			No signify
Girl	4.42	1.69	50	98	0.7838	At0.05

Result- from the table it is reveal that the calculate 't' value is 0.7838. Whereas the 't' value at df = 98 by table is 1.98 at 0.05level of no significance which is more than calculated value.

So there is no significant difference between boy/girl group of parsimonious scientific thinking with respect to their classroom performance.

Hypothesis 5 - There will be no effect of classroom performance among the higher secondary boy/girl on testable scientific thinking.

The boys group of scientific thinking of Govt. higher secondary school student having mean on classroom performance is 3.00 and mean of girl group is 2.96.

To find the difference is significant or not. The 't' value is calculated which is follow here

Scientific thinking	Mean	SD	N	df	t	Result
Boy	3.00	1.48	50			No signify
Girl	2.96	1.54	50	98	0.1310	At0.05

Result- from the table it is reveal that the calculate 't' value is 0.1310 whereas the 't' value at df=98 by table is 1.98 at 0.05level of no significance which is more than calculated value.

So there is no significant different between boy/girl group of testable scientific thinking with respect to their classroom performance.

Conclusion :–

The study was conducted to find out the effect of scientific thinking in classroom performance of higher secondary school studentof class XI.

Study on effect of the moral scientific thinking is significant difference among higher secondary boy/girl group of class XI with respect to their classroom performance and study on effect of the creative scientific thinking is no significant difference between higher secondary boy/girl group of class XI with respect to their classroom performance similarly study on effect of the development scientific thinking is significant difference between higher secondary boy/girl group of class XI with respect to their classroom performance and study on effect of the parsimonious scientific thinking is no significant difference between higher secondary boy/girl group of class XI with respect to their classroom performance with study on effect of the testable scientific thinking is no significant difference between higher secondary boy/girl group of class XI with respect to their classroom performance.

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