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The Role of Teachers in Learners' Attempts to Generate Solutions to Problems

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Abstract

The whole effort in science learning and all that is done in the name of science is centered around the processes generating solutions to identified problems. This effort is not just a mechanical process but is a deliberate attempt. Sometimes this attempt is consciously designed and sometime in the trials of the proceeding in science it is imbibed to the extent that the science practitioner feels a part of the problem. Thinking about the solutions to the problems becomes a part of the scientific endeavor. Teaching learning processes in the science classrooms try to develop the culture of science sometimes not part of the design features of the real classrooms. But it is inevitable to escape the problem-solving aspect of science in any scientific endeavor. In a feature rich classroom, the learners can be seen attempting to generate solutions to problems. However, primitive these might seem, these are important part of culture of science. In the present study the teachers have planned their classroom proceedings in a specific framework. This frameworkpermits strengths of informal environments to be used in the formal classroom settings. The study focuses on preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of Teacher's Gender, Nature of School Management and School Type.In the study relevant graphs related to this focus have been drawn and interpreted. 'Statistical Descriptives' of the same have also been interpreted as part of the study. The study did not find any significant difference in pre-service teachers' response to "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of Teacher's Gender, Nature of School Management and School Type. For a teacher it becomes utmost important to encourage these attempts by

the learners to generate solutions to problems, whether identified by the teacher or by them or by the collective efforts of all or some of the participants.The study contributes towards understanding the role of teachers in learners' attempts to generate solutions to problems.

Key Words: Culture of Science, Learning Strands, Science Classrooms, Pre-Service Teacher Education, Teacher's Gender, Nature of School Management, School Type, Generate Solutions to Problems

Introduction:

The whole effort in science learning and all that is done in the name of science is centered around the processes generating solutions to identified problems. This effort is not just a mechanical process but is a deliberate attempt. Sometimes this attempt is consciously designed and sometime in the trials of the proceeding in science it is imbibed to the extent that the science practitioner feels a part of the problem. Thinking about the solutions to the problems becomes a part of the scientific endeavor. Teaching learning processes in the science classrooms try to develop the culture of science sometimes not part of the design features of the real classrooms. But it is inevitable to escape the problem-solving aspect of science in any scientific endeavor. This study is specially contextualized in the learning strands framework informal Learning Strands in Science Classrooms (Kumar, 2014d; Prabha et al., 2013, 2012; Prabha & Kumar, 2014) formally with unit and lesson planning for teaching-learning science. In the process there had been attempts to develop theoretical context of Alternative Frameworks (Kumar, 2011, 2012a, 2015, 2013a, 2013d, 2013f, 2013g, 2013l, 2013i, 2014m, 2014x) and to undertake Concept specific researches (Kumar, 2013m) on Alternative Framework in Science on Magnets (Kumar, 2014c), Rain (Kumar, 2014u), Soil (Kumar, 2014w), Cells (Kumar, 2014n), Electric Current (Kumar, 2014f), light (Kumar, 2014o), Blood (Kumar, 2014j),Food (Kumar, 2014l),Mirrors and Lenses (Kumar, 2014s), Universe (Kumar, 2014r), Plant Reproduction (Kumar, 2014t), Sources of Energy (Kumar, 2014v), Air (Kumar, 2014i), Force (Kumar, 2014q), Light (Kumar, 2014o) etc. This had been followed by further research on understanding Natural Dispositions of the engaged teachers in Classroom Context (Kumar, 2013a) and related Processes (Kumar, 2012b, 2012c, 2014b, 2014e, 2014d, 2014h, 2014g, 2014p, 2014k, 2015, 2013b, 2013c, 2013e, 2013h, 2013j, 2013k, 2013n, 2014a).All the above cited attempts were focused on something else and there had been a research gap on the factors affecting 'Encouraged Learners Attempt to Generate Solutions to Problems' in the specified context. The current study attempts to delve into that gap.

Research Methodology

Research Questions

The following questions are focused on the three identified factors viz. Teacher's Gender, Nature of School Management and School Type.

The following questions are focused:

1. How do we graphically represent preservice teacher's natural dispositions towards"Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identifiedfactors?
2. How do we interpret 'statistical descriptives' related to preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identifiedfactors?
3. What are the differences (if any) in preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identified factors?

Research Objectives

The study has focused on the following objectives:

1. To draw and interpret relevant graphs related to preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identified factors.
2. To interpret the 'statistical descriptives' related to preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identified factors.
3. To locate the differences (if any) in preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of the identified factors.

Methodology, Sample and Tools:

Reflecting on his own experiences in the realm of science education and related literature, the researcher developed a tool containing 26 items in total. These items pertained to different

questions arising out of thoughts in the area of study related to teaching-learning processes in science. In order to probe these questions, the wide-ranging tool developed by theresearcher was validated by the field experts, and colleagues in the teacher education institutions. The identified issues related to the vagueness of language and formatting style etc. were fixed in the process. This increased the validity of the questionnaire. This questionnaire was designed in the form of self- appraisal. The tool consisted of both open ended and close ended questions. These could be analysed both quantitatively and qualitatively. This tool was used for exploring the specific context of the science classrooms in the eighteen selected schools. The researchers used IBM-SPSS for analysis of the data. Observations and unstructured interviews were used to triangulate the data.

38 Pre-Service Science teachers from two B.Ed. colleges were selected as the sample. This sample belonged to University of Delhi and GGSIP University, Delhi. First College had 8 participants and second college had 30 participant Teachers. These pre-service teachers were participating in 18 schools across Delhi (Capital of India) for their School Life Experience Program. These were being guided by one of researchers from this team for designing and conducting their science lessons using the learning strands framework. These teachers were found to have diverse graduation and post-graduation subject combination. These 38 Pre-Service teachers were given codes to preserve their identity.From first College of Education,code numbers 1.01 to code number 1.30 were given to 30 Pre-service teachers.From Second College of Education, 8 Pre-Service teachers were given code numbers 2.01 to code number 2.08. The sample nature of the sample is purposive. The sample came out to be heterogeneous in terms of many factors including socio-economic backgrounds. The science learners too belonged to diverse school settings. Thus, we can say that diversity in teaching-learning settings has been embodiedprincipally in the sample.

The properties of different factors that had been studied in the sample are described below.

Gender				
		Value	Count	Percent
Standard Attributes	Label	Teacher's Gender		
	Type	String		
	Measurement	Nominal		
Valid Values	1	Male	7	23.3%

	2	Female	23	76.7%
	3	Others	0	0.0%

Management				
		Value	Count	Percent
Standard Attributes	Label	Nature of School Management		
	Type	String		
	Measurement	Nominal		
Valid Values	1	Government School	5	16.7%
	2	Government Aided School	3	10.0%
	3	Private School	21	70.0%
	4	Kendriya Vidyalaya	1	3.3%

School Type				
		Value	Count	Percent
Standard Attributes	Label	School Type		
	Type	String		
	Measurement	Nominal		
Valid Values	1	'Boys Only' School	0	0.0%
	2	'Girl's Only' School	4	13.3%
	3	Co-Ed School	26	86.7%

Analysis of Data

As described in the earlier section too, the schedule of self-assessment contained 26 items. These could be responded as disagree, agree, and strongly agree. In order to quantify the data these responses were given the marks zero, one and two respectively. This resulted in

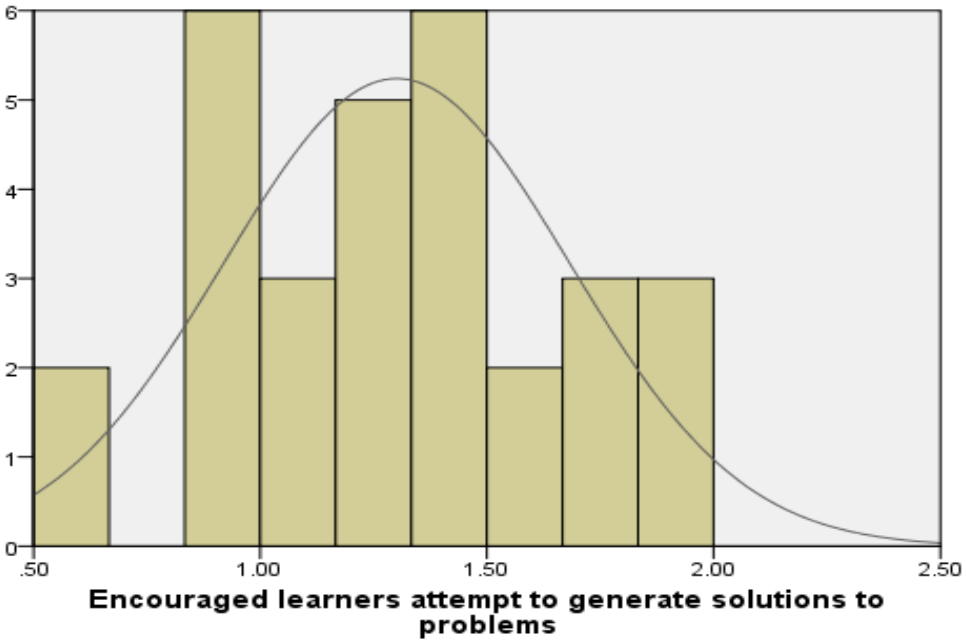
calculation of average score of one specific teacher. The average scores of the 30 responding teachers on the selected issue "Encouraged Learners Attempt to Generate Solutions to Problems" were analysed. Graphs and descriptives from this analysis is being presented in "findings" part of the study.

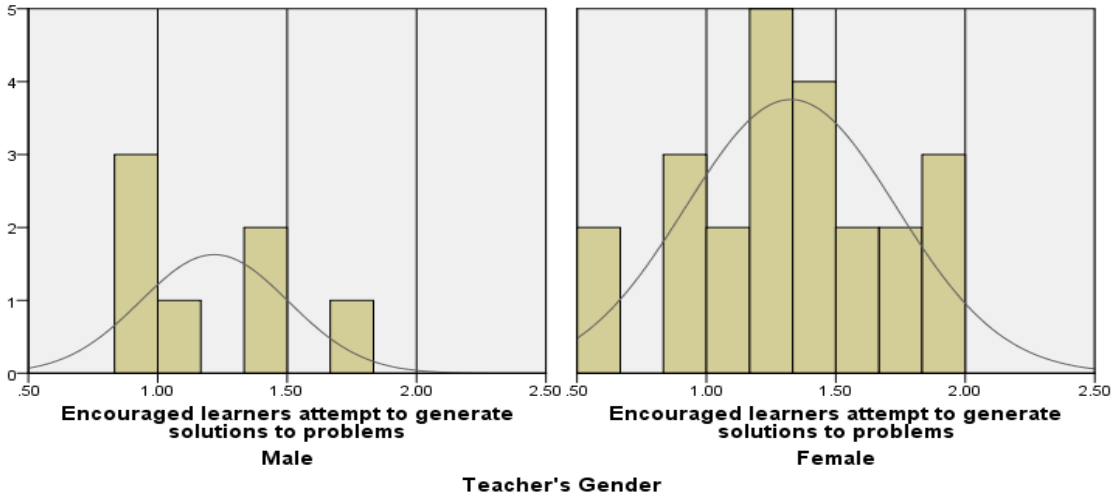
Findings

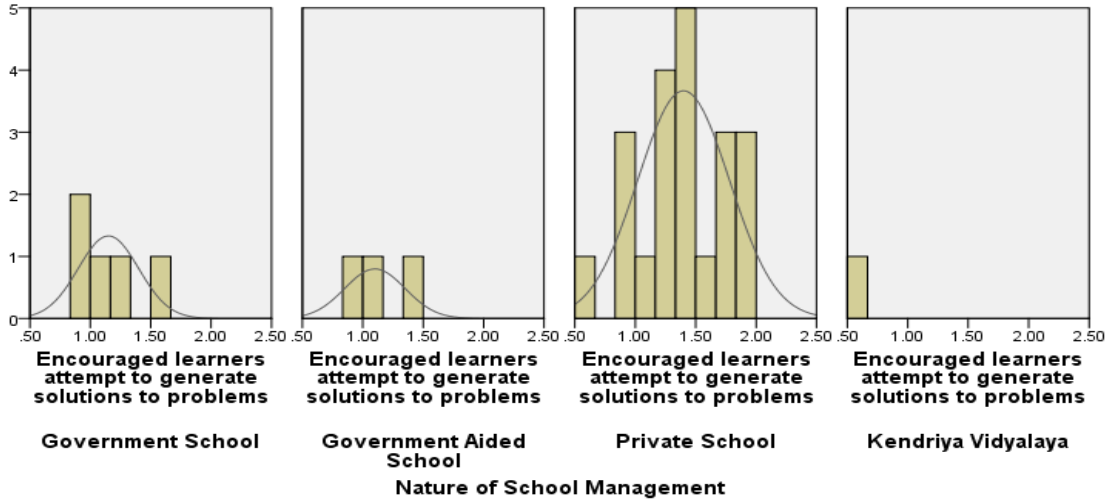
Table 1 shows the average scores of several teachers on the feedback schedule related to the Component "Encouraged Learners Attempt to Generate Solutions to Problems" of the teaching-learning environment in damage of Teachers' Self-Assessment. The evaluation, interpretation and appropriate graphical descriptions had been used in the following discussions using the information from the Table 1.

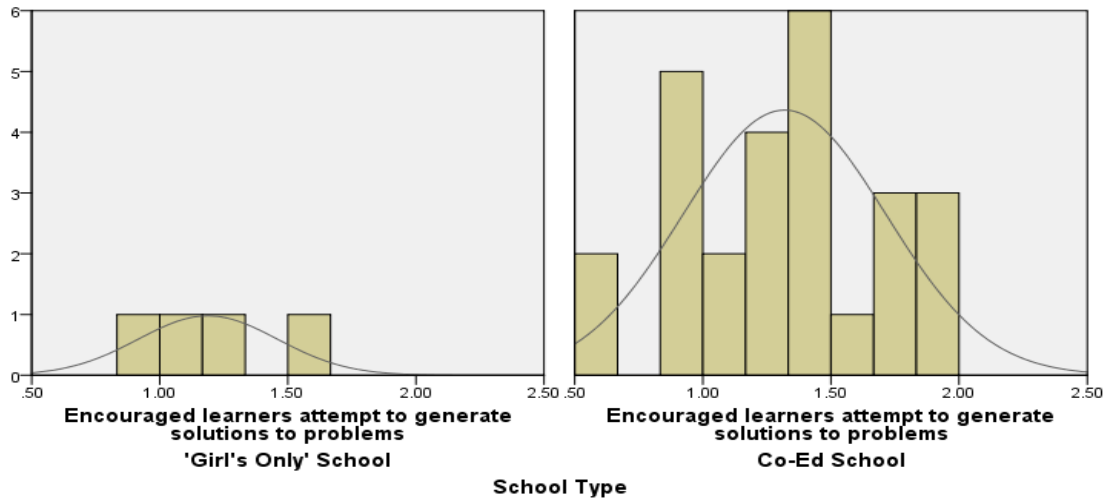
Table 1 - Individual average score of different respondents on the item: Encouraged Learners Attempt to Generate Solutions to Problems

Tch. Cd.	1.03	1.09	1.14	1.22	1.27	1.25	2.01	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.1	1.11	1.12	1.13	1.17	1.18	1.19	1.2	1.21	1.23	1.24	1.25	1.26	1.3	2.02	2.03
Av. Score	0.95	1.1	1	1.73	1.35	1.4	1	1.2	1.2	1.8	1.3	1.95	1.2	1	1.2	1.5	1.4	1.55	1.95	2	1.15	1.4	1.6	1.45	1.7	1.1	0.9	0.85	0.6	0.5




Encouraged learners attempt to generate solutions to problems
Male
Encouraged learners attempt to generate solutions to problems
Female
Teacher's Gender


Encouraged learners attempt to generate solutions to problems
Government School
Encouraged learners attempt to generate solutions to problems
Government Aided School
Encouraged learners attempt to generate solutions to problems
Private School
Encouraged learners attempt to generate solutions to problems
Kendriya Vidyalaya
Nature of School Management


Encouraged learners attempt to generate solutions to problems
'Girl's Only' School
Encouraged learners attempt to generate solutions to problems
Co-Ed School
School Type

Case Processing Summary						
	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Encouraged learners attempt to generate solutions to problems * Teacher's Gender	30	100.0%	0	0.0%	30	100.0%
Encouraged learners attempt to generate solutions to problems * Nature of School Management	30	100.0%	0	0.0%	30	100.0%
Encouraged learners attempt to generate solutions to problems * School Type	30	100.0%	0	0.0%	30	100.0%

Encouraged learners attempt to generate solutions to problems * Teacher's Gender

Report								
Encouraged learners attempt to generate solutions to problems								
Teacher's Gender	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis
Male	1.2182	1.1000	.95	1.73	.78	.28598	.983	.075
Female	1.3261	1.3000	.50	2.00	1.50	.40728	-.148	-.347
Total	1.3009	1.2500	.50	2.00	1.50	.38068	.032	-.323

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Encouraged learners attempt	Between Groups	(Combined)	.062	1	.062	.423	.521

to generate solutions to problems * Teacher's Gender	Within Groups	4.140	28	.148		
	Total	4.203	29			

Measures of Association		
	Eta	Eta Squared
Encouraged learners attempt to generate solutions to problems * Teacher's Gender	.122	.015

Encouraged learners attempt to generate solutions to problems * Nature of School Management

Report								
Encouraged learners attempt to generate solutions to problems								
Nature of School Management	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis
Government School	1.1500	1.1000	.90	1.55	.65	.25000	1.200	1.608
Government Aided School	1.1000	1.1000	.85	1.35	.50	.25000	.000	.
Private School	1.3989	1.4000	.50	2.00	1.50	.38076	-.296	.075
Kendriya Vidyalaya	.6000	.6000	.60	.60	.00	.	.	.
Total	1.3009	1.2500	.50	2.00	1.50	.38068	.032	-.323

ANOVA Table					
	Sum of Squares	df	Mean Square	F	Sig.

Encouraged learners attempt to generate solutions to problems * Nature of School Management	Between Groups	(Combined)	.928	3	.309	2.456	.086
	Within Groups		3.275	26	.126		
	Total		4.203	29			

Measures of Association		
	Eta	Eta Squared
Encouraged learners attempt to generate solutions to problems * Nature of School Management	.470	.221

Encouraged learners attempt to generate solutions to problems * School Type

Report								
Encouraged learners attempt to generate solutions to problems								
School Type	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis
'Girl's Only' School	1.1875	1.1500	.90	1.55	.65	.27195	.769	1.222
Co-Ed School	1.3184	1.3250	.50	2.00	1.50	.39605	-.070	-.376
Total	1.3009	1.2500	.50	2.00	1.50	.38068	.032	-.323

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Encouraged learners attempt	Between Groups	(Combined)	.059	1	.059	.401	.532

to generate solutions to problems * School Type	Within Groups	4.143	28	.148		
	Total	4.203	29			

Measures of Association		
	Eta	Eta Squared
Encouraged learners attempt to generate solutions to problems * School Type	.119	.014

Analysis and Interpretation:

1) The Mean is 1.3009 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.25 which means fifty percent of the cases lie above and below it. The Range for Total teachers taken together is 1.5 for which minimum value is 0.5 and maximum value is 2. This shows high difference between minimum and maximum values. This difference can be interpretated as high divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.38068. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.92 and 1.68. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is 0.032. which means that the data is slightly positively skewed. i.e., the number of high scorers is greater than the low scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is -0.323 which shows that the data distribution will be interpreted not outside the range of normality. This is evident in the graphical representation of the data as well.

2(a) The Mean is 1.2182 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.1 which means fifty percent of the cases lie above and below it. The Range for Male teachers taken together is 0.78 for which minimum value is 0.95 and maximum value is 1.73. This shows high

difference between minimum and maximum values. This difference can be interpretated as high divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.28598. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.93 and 1.50. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is 0.983. which means that the data is moderately positively skewed. i.e., the number of high scorers is greater than the low scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is 0.075 which shows that the data distribution will be interpreted not outside the range of normality. This is evident in the graphical representation of the data as well.

2(b) The Mean is 1.3261 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.3 which means fifty percent of the cases lie above and below it. The Range for Female teachers taken together is 1.5 for which minimum value is 0.5 and maximum value is 2. This shows high difference between minimum and maximum values. This difference can be interpretated as high divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.40728. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.91 and 1.73. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is -0.148. which means that the data is slightly negatively skewed. i.e., the number of low scorers is greater than the high scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is -0.347 which shows that the data distribution will be interpreted not outside the range of normality. This is evident in the graphical representation of the data as well.

2(c) We test the null-hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * Teacher's Gender the value of the F-ratio comes out to be 0.423 and the p-value comes out to be 0.521 through ANOVA. The interpretation of the p-value reveals that it is more than the alpha level i.e., 0.05 which means that we retain the null hypothesis. The interpretation of the F-ratio reveals that it is less than the critical value 4.196 which means that we retain the null hypothesis. On the basis of this interpretation, we retain the null

hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * Teacher's Gender as a conclusion of this interpretation. The value of eta-squared is 0.015 as shown in the table. As we retain the null-hypothesis the strength of association between Encouraged Learners Attempt to Generate Solutions to Problems * Teacher's Gender is considered insignificant.

3(a) The Mean is 1.15 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.1 which means fifty percent of the cases lie above and below it. The Range for Government School teachers taken together is 0.65 for which minimum value is 0.9 and maximum value is 1.55. This shows low difference between minimum and maximum values. This difference can be interpretated as low divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.25. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.90 and 1.40. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is 1.2. which means that the data is highly positively skewed. i.e., the number of high scorers is greater than the low scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is 1.608 which shows that the data distribution will be interpreted outside the range of normality. This is evident in the graphical representation of the data as well.

3(b) The Mean is 1.1 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.1 which means fifty percent of the cases lie above and below it. The Range for Government Aided School teachers taken together is 0.5 for which minimum value is 0.85 and maximum value is 1.35. This shows low difference between minimum and maximum values. This difference can be interpretated as low divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.25. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.85 and 1.35. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is 0. Kurtosis is incalculable. This is evident in the graphical representation of the data as well.

3(c) The Mean is 1.3989 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.4 which means fifty percent of the cases lie above and below it. The Range for Private School teachers taken together is 1.5 for which minimum value is 0.5 and maximum value is 2. This shows high difference between minimum and maximum values. This difference can be interpretated as high divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.38076. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 1.01 and 1.77. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is -0.296. which means that the data is slightly negatively skewed. i.e., the number of low scorers is greater than the high scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is 0.075 which shows that the data distribution will be interpreted not outside the range of normality. This is evident in the graphical representation of the data as well.

3(d) The Mean is 0.6 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 0.6 which means fifty percent of the cases lie above and below it. The Range for Kendriya Vidyalaya teachers taken together is 0 for which minimum value is 0.6 and maximum value is 0.6. This shows no difference between minimum and maximum values. This difference can be interpretated as no divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is incalculable. Skewness is incalculable. Kurtosis is incalculable. This is evident in the graphical representation of the data as well.

3(e) We test the null-hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * Nature of School Management the value of the F-ratio comes out to be 0.036 and the p-value comes out to be 0.85 through ANOVA. The interpretation of the p-value reveals that it is more than the alpha level i.e., 0.05 which means that we retain the null hypothesis. The interpretation of the F-ratio reveals that it is less than the critical value 2.975 which means that we retain the null hypothesis. On the basis of this interpretation, we retain the null hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * Nature of School Management as a conclusion of this interpretation. The value of eta-squared is 0.221 as shown in the table. As we retain the null-hypothesis the strength of

association between Encouraged Learners Attempt to Generate Solutions to Problems * Nature of School Management is considered insignificant.

4(a) The Mean is 1.1875 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.15 which means fifty percent of the cases lie above and below it. The Range for 'Girl's Only' School teachers taken together is 0.65 for which minimum value is 0.9 and maximum value is 1.55. This shows low difference between minimum and maximum values. This difference can be interpretated as low divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.27195. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.91 and 1.45. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is 0.769. which means that the data is moderately positively skewed. i.e., the number of high scorers is greater than the low scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is 1.222 which shows that the data distribution will be interpreted outside the range of normality. This is evident in the graphical representation of the data as well.

4(b) The Mean is 1.3184 which means on an average most teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems. The Median is 1.325 which means fifty percent of the cases lie above and below it. The Range for Co-Ed School teachers taken together is 1.5 for which minimum value is 0.5 and maximum value is 2. This shows high difference between minimum and maximum values. This difference can be interpretated as high divergence in the mean scores on the response towards Encouraged Learners Attempt to Generate Solutions to Problems. Standard deviation is 0.39605. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.92 and 1.71. This means, on an average most of the teachers agree on Encouraged Learners Attempt to Generate Solutions to Problems and some strongly agree with it. Skewness is -0.07. which means that the data is slightly negatively skewed. i.e., the number of low scorers is greater than the high scorers on the question of Encouraged Learners Attempt to Generate Solutions to Problems. This is evident in the graphical representation of the data as well. Kurtosis is -0.376 which shows that the data distribution will be interpreted not outside the range of normality. This is evident in the graphical representation of the data as well.

4(c) We test the null-hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * School Type the value of the F-ratio comes out to be 0.401 and the p-value comes out to be 0.532 through ANOVA. The interpretation of the p-value reveals that it is more than the alpha level i.e., 0.05 which means that we retain the null hypothesis. The interpretation of the F-ratio reveals that it is less than the critical value 4.196 which means that we retain the null hypothesis. On the basis of this interpretation, we retain the null hypothesis for the relation Encouraged Learners Attempt to Generate Solutions to Problems * School Type as a conclusion of this interpretation. The value of eta-squared is 0.014 as shown in the table. As we retain the null-hypothesis the strength of association between Encouraged Learners Attempt to Generate Solutions to Problems * School Type is considered insignificant.

Conclusion:

To conclude, we reiterate that the teaching learning processes in the science classrooms try to develop the culture of science. This culture of science sometimes not explicitly part of the design features of the real classrooms. Also, that it is inevitable to escape the problem-solving aspect of science in any scientific endeavor. We have proposed that in a feature rich classroom, the learners can be seen attempting to generate solutions to problems. However, primitive these might seem, these are important part of culture of science. For a teacher it becomes utmost important to encourage these attempts by the learners to generate solutions to problems, whether identified by the teacher or by them or by the collective efforts of all or some of the participants. The study focuses on preservice teacher's natural dispositions towards "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of Teacher's Gender, Nature of School Management and School Type. In the study relevant graphs related to this focus have been drawn and interpreted. 'Statistical Descriptives' of the same have also been interpreted as part of the study. The study did not find any significant difference in pre-service teachers' response to "Encouraged Learners Attempt to Generate Solutions to Problems"in terms of Teacher's Gender, Nature of School Management and School Type.

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