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The Web of Pre-Conceived Notions about Expected Answers: Pre-Service Teachers' Struggles

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Abstract

The root of the web of pre-conceived notions of teachers about the answersexpected from the learners may be located in the Herbartian lesson-planning. The repetitive, inflexible structure of the Herbartian lesson-plan may be suitable for the content delivery and instructional frameworks of learning. But, this Herbartian model of designing teaching-learning processes has its own limitations, if we are thinking about developing culture of science in the science classrooms. The web of pre-conceived notion about the expected answers is weaved not just by the Herbartian lesson-planning. These notions might develop due to various other factors. These factors include (but are not limited to) the pressure to complete syllabus in specified time-frames, the notion of science represented in the textbooks and reference books, the fixed notion about nature of science, societal view of science to be exact and precise, personal views of teachers and learners about scientific concepts, tools and techniques of evaluation, interaction gap between realscientists and teaching-learning contexts etc.One of the researchers from this team worked for more than eight years developing an alternative to this Herbartian framework. The learning strands framework described in the introduction part of this paper helped him giving an alternative way to write specific objectives in place of much celebrated Bloom's Taxonomy. In the present study the teachers have planned their classroom proceedings this framework which allows for strengths of informal environments to be used in formal classroom settings. The study focuses on preservice teacher's natural dispositions

towards “Could Come Out of the Pre-conceived Notion of Expected Answer”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 “Could Come Out of the Pre-conceived Notion of Expected Answer”in terms of Teacher's Gender, Nature of School Management and School Type. During the earlier attempts to explore the alternative framework to Herbartian lesson-planning there had been research gaps. The research gap related to some factors affecting teachers’ attempt to “Come Out of the Pre-conceived Notion of Expected Answer” has been explored. The present study contributes to the understanding of this aspect in the specific context of the alternative framework to Herbartian lesson-planning developed by one of the researchers of this team and applied in eighteen schools.

Key Words: Culture of Science, learning strands, Science classrooms, Pre-service teacher education,Teacher's Gender, Nature of School Management, School Type, Expected Answer

Introduction:

(Bell et al., 2009)proposed a “strands of science learning” framework that articulates science-specific capabilities supported by informal environments. It builds on the framework developed for K-8 science learning in Taking Science to School(Duschl et al., 2007) “That four-strandframework aligns tightly with the Strands 2 through 5. They have added two additional strands—Strands 1 and 6—which are of special value in informal learning environments. The six strands illustrate how schools and informal environments can pursue complementary goals and serve as a conceptual tool for organizing and assessing science learning. The six interrelated aspects of science learning covered by the strands reflect the field’s commitment to participation—in fact, they describe what participants do cognitively, socially, developmentally, and emotionally in these settings. Learners in informal environments:

Strand 1: Experience excitement, interest, and motivation to learn about phenomena in the natural and physical world.

Strand 2: Come to generate, understand, remember, and use concepts, explanations, arguments, models, and facts related to science.

Strand 3: Manipulate, test, explore, predict, question, observe, and make sense of the natural and physical world.

Strand 4: Reflect on science as a way of knowing; on processes, concepts, and institutions of science; and on their own process of learning about phenomena.

Strand 5: Participate in scientific activities and learning practices with others, using scientific language and tools.

Strand 6: Think about themselves as science learners and develop an identity as someone who knows about, uses, and sometimes contributes to science (Bell et al., 2009)".

Background

The root of the web of pre-conceived notions of teachers about the answers expected from the learners may be located in the Herbartian lesson-planning. The repetitive, inflexible structure of the Herbartian lesson-plan may be suitable for the content delivery and instructional frameworks of learning. But, this Herbartian model of designing teaching-learning processes has its own limitations, if we are thinking about developing culture of science in the science classrooms. The web of pre-conceived notion about the expected answers is weaved not just by the Herbartian lesson-planning. These notions might develop due to various other factors. These factors include (but are not limited to) the pressure to complete syllabus in specified time-frames, the notion of science represented in the textbooks and reference books, the fixed notion about nature of science, societal view of science to be exact and precise, personal views of teachers and learners about scientific concepts, tools and techniques of evaluation, interaction gap between real scientists and teaching-learning contexts etc. One of the researchers from this team worked for more than eight years developing an alternative to this Herbartian framework. The learning strands framework described in the introduction part of this paper helped him giving an alternative way to write specific objectives in place of much celebrated Bloom's Taxonomy. This innovative application of 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 formulates the context of this paper. In the same process of developing alternative to Herbartian framework, 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).During the above cited attempts to explore this alternative framework to Herbartian lesson-planning there had been a research gap. This research gap was related to the study of some factors affecting teachers' attemptto"Come Out of the Pre-conceived Notion of Expected Answer". The present study is attempted to understand this aspect.

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.

1. How do we graphically represent preservice teacher's natural dispositions towards"Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of the identifiedfactors?
2. How do we interpret 'statistical descriptives' related to preservice teacher's natural dispositions towards "Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of the identifiedfactors?
3. What are the differences (if any) in preservice teacher's natural dispositions towards "Could Come Out of the Pre-conceived Notion of Expected Answer"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 "Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of the identified factors.
2. To interpret the 'statistical descriptives' related to preservice teacher's natural dispositions towards "Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of the identified factors.
3. To locate the differences (if any) in preservice teacher's natural dispositions towards "Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of the identified factors.

Methodology, Sample and Tools:

A review of literature in the context of the studyenriched with experiences in the domain of science education brought about a tool to explore this context. This tool developed in the form of questionnaire contained total 26 items consisting both close-ended and open-ended questions. These items evolved from different queries related to specific context of teaching-learning processes designed as part of framework developed as an alternative to the Herbartian way of planning. This extensive tool was validated by the field experts in a holistic way. Colleagues in the teacher education institutions were also part of the validation process. Certain issues related to the language and formatting were identified and addressed before applying the tool. The researchers used IBM-SPSS in order to analyze the data received through the application of the tool. Observation and unstructured interviews were used to triangulate the data.

Purposive sample of 38 Pre-Service Science teachers was chosen. The sample belonged to University of Delhi and GGSIP University, Delhi. First B.Ed. College (from University of Delhi) had 8 participants and second B.Ed. college (from GGSIP University) had 30 participants. They were connected to 18 schools across Delhi for their SLEP (School Life Experience Program). During SLEP they were engaged by one of researchers from this team in application of the alternative framework of Lesson and Unit planning. Different graduation and post-graduation subjects maintained the diversity in expertise. The identity of sample teachers was preserved. For this purpose they were allotted codes. From first B.Ed. college, code numbers 1.01 to code number 1.30 and from second B.Ed. college, code numbers 2.01 to code number 2.08were prearranged. The sample of the pre-service teachers and associated

sample of the learners both revealed themselves to be heterogeneous in terms of socio-economic diversity. As a result, we can assume heterogeneity in teaching-learning settings in which the alternative frameworkwas applied and studied.

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%

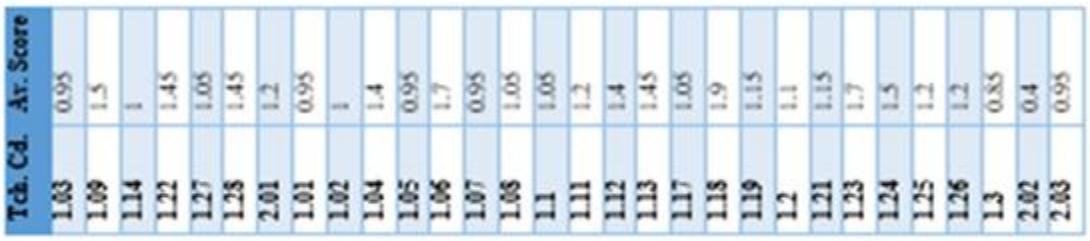
Analysis of Data

From the developed questionnairetool, the issue "Encouraged Learners Attempt to Generate Solutions to Problems" was selected for analysis in this paper. On this issue, the responses as disagree, agree, and strongly agree were recorded. These responses were quantified. For quantification marks zero, one and two respectively were given to these responses. Thus, we got average score of one specific teacher. As data could not be collected from eight teachers, the average scores of theremaining 30 responding teachers are analysed and reported. As per the research questions of the paper, relevant graphs, descriptives and their analysis arebeing presented in the study.

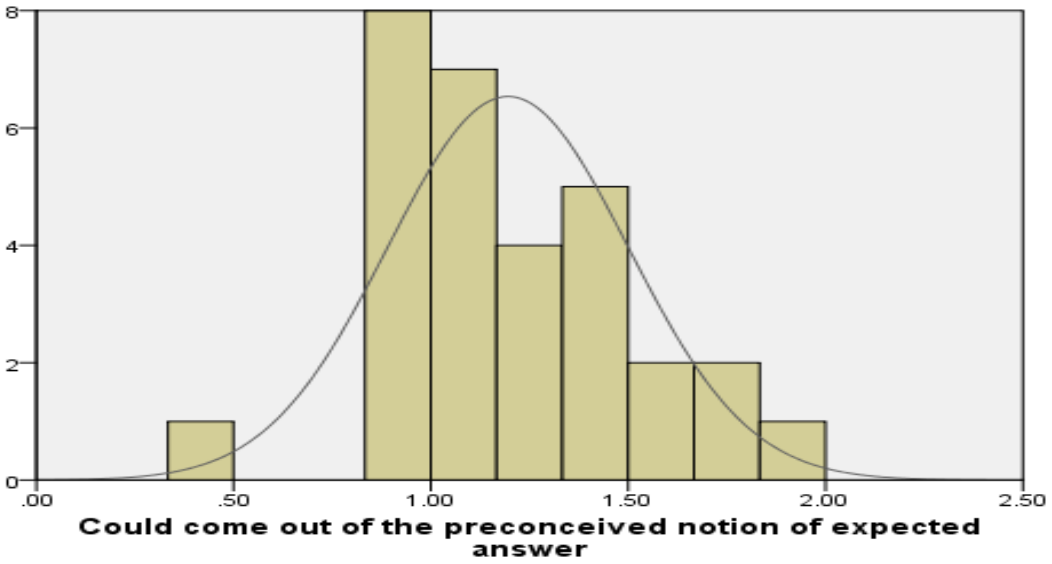
Findings

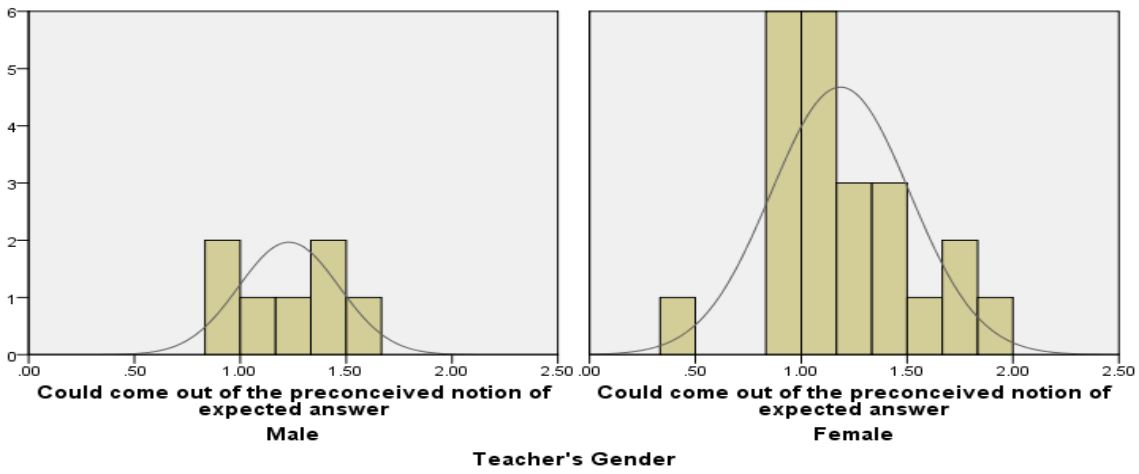
Table 1 shows the average scores of several teachers on the feedback schedule related to the Component "Could Come Out of the Pre-conceived Notion of Expected Answer" of the teaching-learning environment in damage of Teachers' Self-Assessment. The evaluation, interpretation and appropriate graphical descriptions had been used in the following discussions using the information from the Table 1.

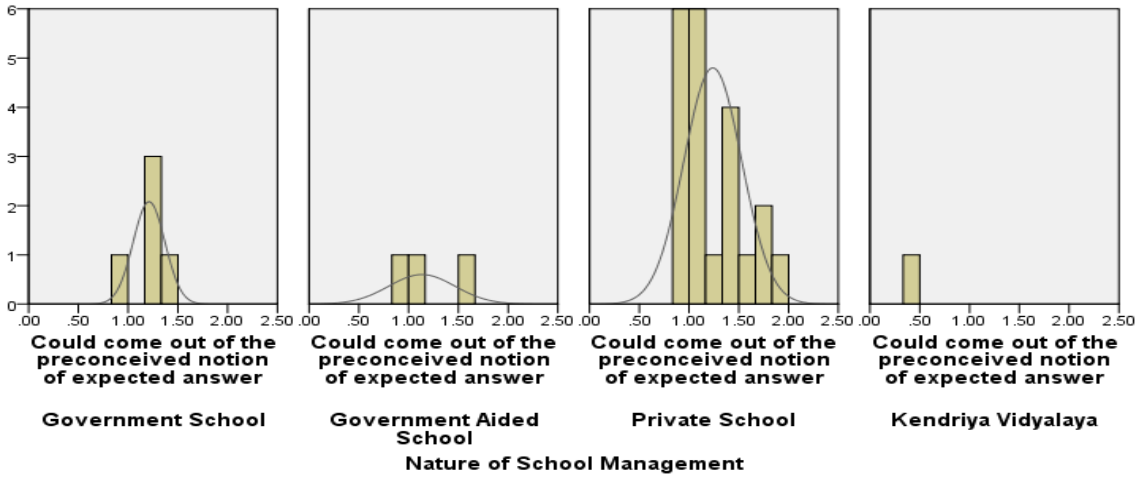
Table 1 - Individual average score of different respondents on the item: Could Come Out of the Pre-conceived Notion of Expected Answer

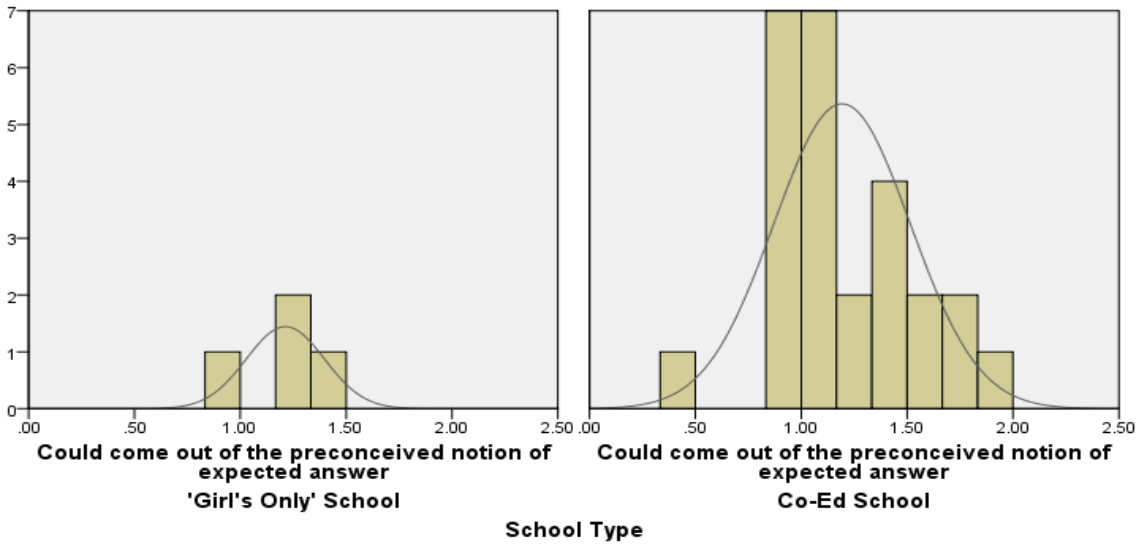


Tch. Cd.	1.03	1.09	1.14	1.22	1.27	1.28	2.01	1.01	1.02	1.04	1.05	1.06	1.07	1.08	1.1	1.11	1.12	1.13	1.17	1.18	1.19	1.2	1.21	1.23	1.24	1.25	1.26	1.3	2.02	2.03
Av. Score	0.95	1.5	1	1.45	1.05	1.45	1.2	0.95	1	1.4	0.95	1.7	0.95	1.05	1.05	1.2	1.4	1.45	1.05	1.9	1.15	1.1	1.15	1.7	1.5	1.2	1.2	0.85	0.4	0.95


Could come out of the preconceived notion of expected answer


Could come out of the preconceived notion of expected answer
Male
Could come out of the preconceived notion of expected answer
Female
Teacher's Gender


Could come out of the preconceived notion of expected answer
Government School
Could come out of the preconceived notion of expected answer
Government Aided School
Could come out of the preconceived notion of expected answer
Private School
Could come out of the preconceived notion of expected answer
Kendriya Vidyalaya
Nature of School Management



Case Processing Summary						
	Cases					
	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Could come out of the preconceived notion of expected answer * Teacher's Gender	30	100.0%	0	0.0%	30	100.0%
Could come out of the preconceived notion of expected answer * Nature of School Management	30	100.0%	0	0.0%	30	100.0%
Could come out of the preconceived notion of expected answer * School Type	30	100.0%	0	0.0%	30	100.0%

Could come out of the preconceived notion of expected answer * Teacher's Gender

Report								
Could come out of the preconceived notion of expected answer								
Teacher's Gender	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis
Male	1.2292	1.2000	.95	1.50	.55	.23675	.043	-2.400
Female	1.1848	1.1500	.40	1.90	1.50	.32698	.174	.870
Total	1.1952	1.1500	.40	1.90	1.50	.30508	.112	.812

ANOVA Table							
			Sum of Squares	df	Mean Square	F	Sig.
Could come out of the preconceived notion of expected answer * Teacher's Gender	Between Groups	(Combined)	.011	1	.011	.110	.742
	Within Groups		2.688	28	.096		
	Total		2.699	29			

Measures of Association		
	Eta	Eta Squared
Could come out of the preconceived notion of expected answer * Teacher's Gender	.063	.004

Could come out of the preconceived notion of expected answer * Nature of School Management

Report
Could come out of the preconceived notion of expected answer

Nature of School Management	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis
Government School	1.2100	1.2000	1.00	1.45	.45	.15969	.467	2.116
Government Aided School	1.1333	1.0500	.85	1.50	.65	.33292	1.056	.
Private School	1.2383	1.1500	.95	1.90	.95	.29082	.843	-.347
Kendriya Vidyalaya	.4000	.4000	.40	.40	.00	.	.	.
Total	1.1952	1.1500	.40	1.90	1.50	.30508	.112	.812

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Could come out of the preconceived notion of expected answer * Nature of School Management	Between Groups	(Combined)	.684	3	.228	2.942	.052
	Within Groups		2.015	26	.078		
	Total		2.699	29			

Measures of Association

	Eta	Eta Squared
Could come out of the preconceived notion of expected answer * Nature of School Management	.503	.253

Could come out of the preconceived notion of expected answer * School Type

Report

Could come out of the preconceived notion of expected answer

School Type	Mean	Median	Minimum	Maximum	Range	Std. Deviation	Skewness	Kurtosis

'Girl's Only' School	1.2125	1.2000	1.00	1.45	.45	.18428	.404	1.591
Co-Ed School	1.1925	1.1250	.40	1.90	1.50	.32223	.127	.579
Total	1.1952	1.1500	.40	1.90	1.50	.30508	.112	.812

ANOVA Table

			Sum of Squares	df	Mean Square	F	Sig.
Could come out of the preconceived notion of expected answer * School Type	Between Groups	(Combined)	.001	1	.001	.014	.905
	Within Groups		2.698	28	.096		
	Total		2.699	29			

Measures of Association

	Eta	Eta Squared
Could come out of the preconceived notion of expected answer * School Type	.023	.001

Analysis and Interpretation:

1) The Mean is 1.1952 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.15 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 0.4 and maximum value is 1.9. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.30508. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.89 and 1.50. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived

Notion of Expected Answer and some strongly agree with it. Skewness is 0.112. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is 0.812 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 1.2292 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.2 which means fifty percent of the cases lie above and below it. The Range for Male teachers taken together is 0.55 for which minimum value is 0.95 and maximum value is 1.5. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.23675. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.99 and 1.46. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.043. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is -2.4 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.

2(b) The Mean is 1.1848 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.15 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 0.4 and maximum value is 1.9. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.32698. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.85 and 1.51. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.174. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is 0.87 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 Could Come Out of the Pre-conceived Notion of Expected Answer * Teacher's Gender the value of the F-ratio comes out to be 0.110 and the p-value comes out to be 0.742 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 Could Come Out of the Pre-conceived Notion of Expected Answer * Teacher's Gender as a conclusion of this interpretation. The value of eta-squared is 0.004 as shown in the table. As we retain the null-hypothesis the strength of association between Could Come Out of the Pre-conceived Notion of Expected Answer * Teacher's Gender is considered insignificant.

3(a) The Mean is 1.21 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.2 which means fifty percent of the cases lie above and below it. The Range for Government School teachers taken together is 0.45 for which minimum value is 1 and maximum value is 1.45. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.15969. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 1.05 and 1.36. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.467. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is 2.116 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 1.1333 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.05 which means fifty

percent of the cases lie above and below it. The Range for Government Aided School teachers taken together is 0.65 for which minimum value is 0.85 and maximum value is 1.5. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.33292. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.80 and 1.46. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 1.056. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is incalculable.

3(c) The Mean is 1.2383 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.15 which means fifty percent of the cases lie above and below it. The Range for Private School teachers taken together is 0.95 for which minimum value is 0.95 and maximum value is 1.9. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.29082. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.94 and 1.52. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.843. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. 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.

3(d) The Mean is 0.4 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 0.4 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 0.4 and maximum value is 0.4. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. 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 Could Come Out of the Pre-conceived Notion of Expected Answer * Nature of School Management the value of the F-ratio comes out to be 2.942 and the p-value comes out to be 0.052 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 Could Come Out of the Pre-conceived Notion of Expected Answer * Nature of School Management as a conclusion of this interpretation. The value of eta-squared is 0.253 as shown in the table. As we retain the null-hypothesis the strength of association between Could Come Out of the Pre-conceived Notion of Expected Answer * Nature of School Management is considered insignificant.

4(a) The Mean is 1.2125 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.2 which means fifty percent of the cases lie above and below it. The Range for 'Girl's Only' School teachers taken together is 0.45 for which minimum value is 1 and maximum value is 1.45. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.18428. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 1.02 and 1.39. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.404. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is 1.591 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 1.1925 which means on an average most teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer. The Median is 1.125 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 0.4 and maximum value is 1.9. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. Standard deviation is 0.32223. S.D. when interpreted with the calculated means, it implies that most of the teachers scored between 0.87 and 1.51. This means, on an average most of the teachers agree on Could Come Out of the Pre-conceived Notion of Expected Answer and some strongly agree with it. Skewness is 0.127. 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 Could Come Out of the Pre-conceived Notion of Expected Answer. This is evident in the graphical representation of the data as well. Kurtosis is 0.579 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 Could Come Out of the Pre-conceived Notion of Expected Answer * School Type the value of the F-ratio comes out to be 0.014 and the p-value comes out to be 0.905 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 Could Come Out of the Pre-conceived Notion of Expected Answer * School Type as a conclusion of this interpretation. The value of eta-squared is 0.001 as shown in the table. As we retain the null-hypothesis the strength of association between Could Come Out of the Pre-conceived Notion of Expected Answer * School Type is considered insignificant.

Conclusion:

Herbartian models of lesson planning have been criticized for various reasons.one of them is the rigidity of its structure. The alternativeplanning framework developed in the background of this study challenges its notions and design elements. Different aspects of this alternative model have been thoroughly presented in the form of different papers.More work is needed to understand the under-explored aspects of this framework. In this context the present study focuses on preservice teacher's natural dispositions towards "Could Come Out of the Pre-

conceived Notion of Expected Answer"in terms of Teacher's Gender, Nature of School Management and School Type in specific context of the alternative model or framework.In the studyrelevant 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 "Could Come Out of the Pre-conceived Notion of Expected Answer"in terms of Teacher's Gender, Nature of School Management and School Type.

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