

## **FOSTERING CURIOSITY IN CHILDREN: CLASSROOM REALITIES OF INDIAN SCHOOLS**

**Chandra B P Singh** (corresponding author)<sup>1</sup>  
*T M Bhagalpur University, Bhagalpur (India)*

**Sanjay Kumar Sinha**<sup>2</sup>  
*ICMR-RMRIMS, Patna*

### **ABSTRACT**

The study attempted to capture a few evidences of curiosity in children fostered by teachers with the help of instructional teaching design across grade and subject. Observational data was recorded from 411 classes of 137 primary and middle schools. Classroom proceedings included various teaching activities that might lead to questioning from both the stakeholders-teachers and students. The classroom proceedings made it obvious that an average teacher could not create a joyful learning situation in the classroom. A large number of teachers kept practising lecturing followed by writing on the board, dictating, reciting and ignored some important techniques such as explaining, demonstration, and experimentation. Teachers asked questions during teaching but showed their biasness to the brighter students in order to ensure correct answers from them. Teachers tried to show their best performance during the observation. The pattern emerged from the analysis suggested that they did not practise curiosity-led instructional teaching design the extent it was being expected. Probably, it was a limitation of in-built education system that gave priority to rote learning, exam score and grades measuring for more static knowledge and less understanding knowledge. The findings discussed limitations of in-built education system of public schools.

Keywords: classroom, questioning, lecturing, curiosity, instructional design, education

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### **INTRODUCTION**

The study was designed to ascertain whether classroom teaching practices had an edge to foster curiosity in school children. Presumption is that teachers receive a plethora of teaching inputs during training at various stages to promote epistemic curiosity of children. They are expected to apply curiosity-led instructional strategy to classroom teaching. The New Education Policy of India (2020) lays emphasis on holistic development of learners focussing on “learning how to learn”- away from the culture of rote learning and provides more space for critical thinking with the help of exploratory, collaborative and experiential

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<sup>1</sup>*Professor of Psychology (Rtd.), University Dept. of Psychology, T M Bhagalpur University, Bhagalpur 812007 (Bihar), Email: [chandrabsingh@gmail.com](mailto:chandrabsingh@gmail.com)*

<sup>2</sup>*Social Scientist, Department of Epidemiology and Biostatistics, Rajendra Memorial Research Institute of Medical Sciences (Indian Council of Medical Research), Ministry of Health & Family Welfare, Govt. of India, Agam Kuan, Patna – 800 007, Email: [sanjay.k.sinha2008@gmail.com](mailto:sanjay.k.sinha2008@gmail.com)*

learning. The National Curriculum Framework (2005) outlines many strategies to teaching that are relevant for stimulating curiosity in children.

Previous studies on classroom proceedings in India trace a few evidences of curiosity-led instructional design used by teachers (Singh, 2006; Singh, 2009). Teachers are expected to create some elements of challenges during classroom proceedings. Previous researches disclosed that teachers could hardly encourage their students to participate in exploratory and experiential learning processes. Researches in the West (Hulme, Green and Ladd, 2013) revealed that promoting curiosity in classrooms was effective only for a few learners. A robust instructional teaching design embodies learning environment that helps increase preference for and comfort with a greater level of uncertainty. Classroom proceedings studies in India (Clark, 2000; Saraswati, 2000; Singh, 2006) suggested that teachers did not exercise curiosity-led practices in the classroom which they had learnt during the District Primary Education Programme (DPEP-III). They theoretically admitted the usefulness of curiosity-led instructional strategy to learning but experienced many constraints to apply it to a crowded classroom (Singh, 2009). What are constraints of curiosity-led teaching practices in India?

The Indian schooling system evaluates students' academic achievement based on performance metrics. The quantitative scores get precedence over the critical thinking, explorative and collaborative abilities of learners. The schooling system recognises score cards of performance metrics and largely ignores the unseen talents of children. Learners do not find sufficient space to reflect their skills and competence in the right direction as teacher-centric instructional design does not allow them to be critical during learning processes. Researches in India further confirmed that teachers did not incline to all students in the classroom proceedings. Classroom observations at Delhi schools showed that teachers initiated more interaction with boys, giving more time to answer any question, nodding towards them, looking at their side while teaching (Tulsyan, 2021). Throwing questions or expecting answers from their favourite were some of the common practices of classroom proceedings (Singh, 2006). They had a choice of small group of learners during interaction in the classroom. Performance-oriented goals make students more strategic learners while mastery-oriented goals more deep learners (Grant and Dweck, 2003; Pintrich, 2003; Singh, 2017). Students have a mind-set either to perform or probe in the challenging situation. Learning becomes a means to an end rather than the goal itself when they perform. An effective instructional teaching design can serve both the goals and means of learning by fostering an optimal level of uncertainty (level of challenges).

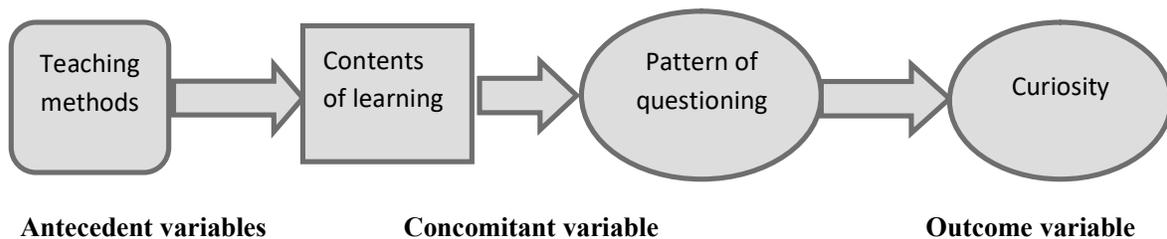
Curiosity is a multifaceted cognitive construct. Behavioural researchers treat curiosity as antecedent variable that leads to learning and performance while many others use it as outcome variable that results from classroom climate and instructional methods (Kashdan et al., 2018). Another group of researchers argue that curiosity is a mediating variable which finally influences learning outcomes (Jirout, Vitiello and Zumbunn, 2018). This intricacy has resulted in confusion while fencing the boundary of the construct of curiosity. Promoting curiosity in children during the classroom teaching demands careful planning and its

execution according to subject and grade. Teachers know in what case the uncertainty (a knowledge gap) is to be created and where the crude rote learning technique can be employed. Sometimes, they use simultaneously both techniques to handle the classroom proceedings. The optimal level of uncertainty varies according to grade and subject (Jirout and Klahr, 2012). On the continuum of curiosity not all students face equal level of learning challenges and take risks of resolving it of the same intensity. Previous researches explain that the intensity of curiosity decreases as students go up to higher classes (Engel, 2013; Jirout and Klahr, 2012). This may result from an inherent deficit of the educational system which still gives weightage to rote learning. It was one of the reasons to notice more surface and strategic learners and less deep learners in Indian education system (Singh, 2017). Performance-oriented students avoided risk failure and were found to be less curious (Hulme, Green and Ladd, 2013). Instructional design embodies both the traditional as well as digital techniques by which curiosity may be fostered in learners. The survey of e-learning revealed that less surfing by students (23 per cent) happened on smartphones or tablet computers to update their knowledge (BEPC, 2020). Instead of e-learning platform games and cartoons were dearer to them. Pedagogues admit that there is no substitute of off-line learning (Jirout, Vitiello and Zumbrunn, 2018). To promote critical thinking teachers need to provide scaffolding for their students and respond to questions generated by them during classroom proceedings. Based on a few indicators of curiosity the study focused on twin core objectives. They were:

1. To identify teaching styles that leads to curiosity
2. To ascertain pattern of questioning generated during classroom transaction.

### **MODEL OF THE STUDY**

There existed no single strategy to foster curiosity in children. Classroom proceedings enfolded a variety of teaching techniques. Some indicators such as questioning, involvement in classroom activity, teachers' response to questioning, etc. were behaviourally observed to estimate the level of curiosity in learners. A linkage of teaching methods with curiosity through a pattern of questioning was formulated:



#### ***Indicators of Curiosity***

Researches on questioning as a teaching and learning strategy are well-documented (Albergaria-Almeida, 2010; Chin and Osborne, 2008; Graesser and Olde, 2003). Teachers

used questioning to check the level of understanding and knowledge of learners. At the same, they adopted questioning to encourage students and assess the level of curiosity. Questioning and its response pattern were presumed to be one of the significant indicators of curiosity.

### ***Research Questions***

The study adopted qualitative approach to capture some behavioural indicators of curiosity. Classroom proceedings constitute multiple dimensions ranging from teaching methods to some other practices. A set of two separate stakeholders-teachers and learners were taken into consideration for observation. If instructional teaching design fosters curiosity in learners, there would be a behavioural reflection on the pattern of questioning. A few research questions were framed to capture curiosity of learners during classroom transaction. They were:

1. Did teachers employ any specific technique to foster curiosity in children during classroom transaction?
2. Was there any pattern of questioning and answering?
3. Did students ask more questions during classroom transaction and get answers from their teachers?

### **RESEARCH SETTING AND PROCEDURES**

The study was conducted in the government-run schools in an eastern state of India covering 137 middle schools and 411 classrooms of grade 3, 5 and 8. It was a multi-stage sampling design covering 12 districts of 9 divisions. At the second level 12 Block Resource Centres (BRCs) were selected. At the third level 12 Cluster Resource Centres (CRCs) - each from one BRC were selected to cover all schools falling under each CRC. At the fourth level 411 classrooms across grade were identified for observation and audio-recording of classroom proceedings. The sample units selected at each level followed Standard Operating Procedure (SOP).

The entire classroom proceedings of a slot of 40 minutes allotted to each period were observed and transcribed. A fair number of them were audio-taped. These were content-analysed. A team of two well-trained FIs for each school was constituted to capture classroom proceedings. Teachers were ensured that the entire classroom proceedings to be transcribed would be recorded only for the research purposes. They were requested to follow their common teaching practices in the classrooms. This arrangement was made in such a way that three observations of each school would cover three separate classroom proceedings of three subjects--languages, mathematics and environmental science/social science by following a counterbalancing design. The data collection work was completed by the end of February 2020.

## **MEASURES**

### ***Classroom Observation Checklist***

A classroom observation checklist comprising teaching styles, planning of lesson, initiation and closing of classes, activities and questioning across grade and subject was developed with the help of a panel of experts. The checklist was tried out in three schools. The checklist captured behaviour of both the stakeholders-- teachers and students across grade and subject. Indicators of classroom proceedings were quantified. FIs were requested to record each activity shown either by teachers or students on each parameter. These were transcribed to measure each parameter applicable to the classroom transaction. At least 20 per cent classes of each subject were audio-recorded. These audio-tape recording were content-analysed to cross-verify the observational reports. If any discrepancy between audio-recording and observational report existed, the team corrected the anomaly.

## **RESULTS**

### ***Grade wise and Subject wise Teaching Method***

Teachers opted their own way to handle the classroom situation which might or might not be a copybook prescription. Teachers' way of conducting the classroom proceedings were not supposed to be predetermined categories of teaching styles as suggested by pedagogues. Teaching styles are presented in Table 1. Lecturing continued to dominate over other teaching methods across grade (about 27 per cent). Teachers not only assigned some tasks to students but guided them during classroom transaction (about 12 per cent). They also kept engaging learners by adopting recitation technique (13 per cent), if required. This technique restricted students to ask questions. Writing on the board was a popular technique to explain learning contents. Simultaneously, they dictated learners at primary classes (7 per cent). They often demonstrated some materials especially in grade 8. The study noted a few evidences of experimentation in grade 5 and 8. Interestingly, teachers moved out of classes to attend to an adjoining class for some reasons. They left classes by instructing learners to complete the assignments till they return. It happened because of handling dual classes in absence of a teacher in another class. There existed a few occasions when teachers made the topic more interesting by using story telling mode. It was to some extent visible in class VIII (5.72 per cent).

Subject wise classroom transaction was an exercise to draw some conclusions on fostering curiosity in a particular subject/topic. In case of language and environmental science/social science (grade 8) lecturing again established its dominance over other techniques. For mathematics it was not a popular practice (7 per cent). Teachers preferred to adopt lecturing in case of language and environmental science /social science. Writing on the board was a common technique to explain intricacy of mathematics (27 per cent). Teachers were found helping individual learners more in mathematics and guiding them to resolve

problems (24 per cent) as compared to language and EVS/SS. However, the cases of unguided assignments (did not attend individual learners) were also evident in the study (about 14 per cent). Dictation was a common teaching practice in language (7 per cent). Less evidences of experimentation were noted (5 per cent) in case of EVS/SS. Similarly, use of demonstration was negligible in all the subjects. A few evidences of narrating the topic like a story teller and making it more interesting were evident in case of language and EVS/SS (about 6 per cent).

**Table 1: Grade wise and Subject wise Teaching Style**

Style	Grade wise action time in minute			Subject wise action time in minute		
	III	V	VIII	Lang	Math	EVS/SS
Lecturing	7.72 (25.73)	7.89 (26.23)	8.75 (29.16)	8.26 (27.53)	2.18 (7.26)	9.17 (30.56)
Telling	1.45 (4.83)	--	1.72 (5.73)	1.16 (3.86)	--	1.75 (5.83)
Demonstration	1.42 (4.73)	1.62 (5.40)	2.29 (7.60)	1.65 (5.50)	1.16 (3.86)	1.47 (4.90)
Dictation	2.07 (6.90)	2.15 (7.16)	1.15 (3.83)	2.26 (7.53)	--	--
Writing on board	3.67 (12.23)	3.08 (10.26)	3.85 (12.83)	3.52 (11.73)	8.10 (27.00)	3.21 (10.70)
Using activity	1.89 (6.30)	1.17 (3.90)	--	1.69 (5.63)	3.05 (10.16)	1.77 (5.90)
Engaged by learners' recitation	3.82 (12.73)	3.42 (11.40)	2.23 (7.43)	3.34 (11.13)	--	1.54 (5.13)
Guided class assignment	4.22 (14.06)	3.72 (12.40)	2.78 (9.26)	4.11 (13.70)	7.27 (24.23)	2.46 (8.20)
Unguided class assignment	1.96 (6.53)	2.77 (9.23)	4.77 (15.90)	2.46 (6.86)	4.39 (14.63)	4.05 (13.50)
Dialogue	--	--	--	--	1.19 (3.96)	1.79 (5.96)
Experimentation	--	1.11 (3.70)	1.28 (4.26)	--	--	1.59 (5.30)
Moving out from the class	1.78 (5.93)	1.26 (4.20)	1.19 (3.96)	1.95 (6.50)	2.65 (8.83)	1.19 (3.96)

*Note: Figure in parenthesis displays percentage*

Teaching styles did not significantly vary in accordance with grade and subject. The expectation that learners would experience more of activities and demonstration and less of lecturing did not get substantive evidences. That learners were given role assignments or were left to fend for themselves for a considerable period of time was not just a reflection of ignorance of training inputs but also of the realities of classroom in the government-run schools of Bihar. Partly because of continued insensitivity to the new expectations and partly

because of a mind-set, teachers preferred to adopt traditional mode of teaching. This was a general view teacher in classrooms. The classroom proceedings further explored a few evidences of lesson planning and preparation. The study noted that teachers had no forward planning of lessons across grade (about 65 per cent). Even learners had no idea of the subject or topic scheduled to be taught. Though teachers kept claiming of preparing lesson plans, no evidence to support their claims was noted. Not preparing the lesson plan was also substantiated by the fact that teachers changed the topic or even the subject midway (for instance, from mathematics to EVS). Nevertheless, around 49 per cent teachers across grade prepared their topics and organised their lecture to be delivered. A well-delivered lecture did not always mean prior planning, as teachers selected topics with which they were more familiar though this may have been covered earlier in the beginning of the session. Probably, the presence of observers made them extra cautious to perform beyond usual. In some cases, it disrupted teacher’s design of instruction and classroom transaction. Surprisingly, teachers did not have their own set of textbooks. In many cases (57 per cent) they took textbooks from learners before teaching. Over 54 per cent classes of all three grades did not match the routine, when verified.

### ***Initiation and Closing of the Classes***

Table 2 shows a pattern of initiation and closing of classes. This analysis was done in view of drawing some inferences about handling the classes. Presumption was that initiation and closing of classes ensured learners’ involvement in classroom learning. Teachers directly arrived at the topic without any sufficient background across grade. At the 8 grade it was about 71 per cent. Hardly a few teachers felt a need to check the previous knowledge which they had given to them. A few teachers initiated the classes either with sufficient background (13-27 per cent) or narrated a relevant story/event (4-17 per cent). Most of the classes got winded up abruptly (36-54 per cent). Recapitulating and evaluating the topic before closing of the classes were least visible. However, assigning homework to them was evident before closing of the classes.

***Table 2: Initiation and closing of Class (%)***

<b>Initiation</b>	<b>Grade</b>		
	<b>III</b>	<b>V</b>	<b>VIII</b>
With sufficient background	26.52	22.72	13.42
Narrating a story or event	17.25	14.38	4.20
Checking the previous knowledge	8.24	8.29	11.65
Directly on the topic	47.97	54.61	70.73
<b>Closing</b>			
Recapitulating	22.43	14.58	12.72
Evaluating	17.27	13.66	14.57
Assigning task	23.75	17.28	26.62
Winding up abruptly	36.55	54.48	46.09

### ***Learners' Activity during Classroom Transaction***

Child-centred teaching remains incomplete without ensuring activity to be performed by learners. Activity carried extra meaning such as singing and dancing and hence, was not acceptable by many of the teachers. Many considered that such activities kill learning time, although children enjoyed them. Such misconceptions coupled with lack of motivation resulted in rare presence of any kind of activity in teaching design. A frequency count suggested that only 47 activities out of around 411 classrooms observations. Of them, 27 activities could take place in grade 3. Only 6 activities were found in the 8 grade. In grade 3 around 41 per cent of all learners were seen to be involved in activity. On the other side, only 26 per cent in grade 5 and 15 per cent in grade 8 of the entire class showed their involvement. Over 60 per cent learners of the entire class in both grade 5 and 8 had no involvement in activity initiated by teachers. While analysing relevance, participation and learning output of activity another interesting pattern of results was noted. Many activities across grade were in fact, not relevant. As a result, over 60 per cent activities did not help them learn in grade 3<sup>rd</sup> and 5<sup>th</sup>. Even activities did not ensure participation of learners in all grades.

### ***Questioning and Answering Pattern during Classroom Teaching***

The way teachers managed classroom transaction might establish a linkage to curiosity in learners. This could be presumed by a pattern of questioning and its interface with learners. The study counted every question separately asked by teachers and learners during classroom transaction and analysed from different angles. Table 3-6 present pattern of questioning. Over 50 per cent of questions in grade 3 and 5 and 36 per cent in grade 8 were directed to entire classes. In grade 8 about 59 per cent questions were directed to individual learners. A few questions were thrown to a particular group, namely, the front row students, gender specific or backbenchers. But teachers, by and large, showed their inclination to brighter students irrespective of gender. They did it to get the answer in presence of the observer. Preference of directing the questions to boys than girls was noted to be higher (59 per cent). In grade 3 and 5 teachers asked more questions from boys (69 per cent). However, questioning in grade 3 was almost equal both for boys and girls. Though there was a gender bias, teachers did it to elicit correct answer from them. Teachers kept waiting for the responses from students across grade (> 50 per cent). On a few occasions they did not either wait for the response or answer themselves. They themselves answered questions without waiting for any response from learners (table 4). While questioning during transaction about 50 per cent students of the entire class of grade 3 and 5 and about 40 per cent of grade 8 responded to their teachers (table 5). However in grade 8 about 53 per cent individual students responded to questions.

Not all teachers had patience to wait for the answer by learners. Table 6 displays a situation when learners failed to answer or did not reply to teachers. Teachers dismissed the answer when found not correct across grade (about 22 per cent). They either corrected the

answer (> 50 per cent) or elaborated it after a request by learners (about 25 per cent), reflecting their sensitiveness to learners.

Further an analysis was done to ascertain grade wise pattern of questions asked by students. Students asked altogether 115 questions (22 from grade 3, 38 from grade 5 and 55 from grade 8). At the lower grade they asked fewer questions. In class 8 the frequency of asking questions got increased. There existed significant variation in asking of questions by each class. Questioning by all across grade did not go beyond 27 per cent. Percentage of asking questions by a few learners radiated between 25 and 42. About 50 per cent individual learners of grade 3 and 47 per cent of grade 8 asked questions during classroom transaction. The remaining class kept listening to teachers. Gender wise analysis disclosed that there existed least variation in asking questions about the topic. 58 per cent boys from grade 5 raised question which was higher than their counterpart (43 per cent).

**Table 3: Questioning by Teachers (%)**

Questioning	Grade		
	III	V	VIII
Entire class	55.25	51.72	36.42
A-group	4.37	7.28	4.97
An individual	40.38	41.00	58.81

**Table 4: Response Pattern of Teachers (%)**

Teacher	Grade		
	III	V	VIII
Waited for the response	57.36	54.29	55.42
Did not wait for the response	17.24	18.38	21.22
Herself/himself answered	25.40	27.33	23.36

**Table 5: Response Pattern of Learners (%)**

Learners	Grade		
	III	V	VIII
Entire class	50.12	47.36	40.43
A-group	9.29	7.29	6.22
An individual	40.59	45.35	53.35

**Table 6: Teachers' Response to Answers (%)**

Teachers	Grade		
	III	V	VIII
Dismissed the answer	21.36	22.16	24.26
Corrected the answer	60.67	52.41	50.28
Requested to elaborate the answer	17.97	25.43	25.46

## **DISCUSSION**

The study attempted to capture some behavioural pattern of curiosity in learners during classroom proceedings. Curiosity was assessed through questioning and its answering pattern during classroom transaction. A live interaction between teachers and learners helped estimate the level of curiosity in learners. Though a slot of 40 minutes was not sufficient to estimate curiosity of learners, teachers made some attempts to create a learning situation for fostering curiosity in them. Also was a fact that respondents had a tendency to respond or behave in a socially desirable way in any survey especially when a set of observers were present during the running classes. The study admitted its limitations and constraints of observational rating technique. The analysis of classroom proceedings made it obvious that by and large, teachers were not capable of promoting the curiosity-led learning environment in the classroom. A large number of teachers kept practising lecturing followed by writing on the board, assigning tasks, dictating, reciting. Demonstration and experimentation required planning and preparation of the topic. Teachers did not give priority to such techniques. As a result, teacher-centric classroom proceedings made classes more passive and monotonous.

Also was a fact that not all learners had same level of curiosity across grade and subject. Even within the subject not all topics could generate critical thinking and questioning. It was contingent upon teacher's ability to assign some tasks to them for self-questioning or design some group activities for generating curiosity in the topic. The study did not find a significant pattern of questioning and answering from both side- teachers and students. Teachers continued floating more questioning to the entire class especially in grade 3 and 5 and less in grade 8 (36 per cent). It was a tendency to ask some general questions from the entire class and to answer it while teaching. Teachers did not wait for the answer from them. They asked very few questions from a particular group (about 4-7 per cent) and focused more on an individual learner. Teachers moved to a particular learner to ensure correct answer of the question while teaching. Questioning directed to the entire class did not go beyond 24 per cent. A group of students was found questioning more at the primary level. However, a few individual learners kept questioning more. Teachers had no time to initiate any group activity. They kept engaging classes without any stimulation to create a gap of knowledge in learners.

Engaging classes and fostering curiosity are two different phenomena. An engaged student may be or may not be curious in the topic to be taught. Curiosity does not require any forced engagement. Engagement was more than paying attention but did not demand an empowered learner forging into new ideas with an open-mind through inquiry and questioning. The study did not get any significant evidence of teaching style which could establish a direct linkage to questioning. Other than mathematics lecturing was a prominent technique for both language and social science. Teachers elicited and supplied factual information in a fairly routine manner. They provided corrective feedback to students but did not provide extra time to puzzle their way through to the right answer. Another alternative

solution was to initiate activity with questions which encouraged students to think of actions rather than answer. Direct instruction was found to be effective in teaching specific facts or bits of information while deeper learning came from students' deriving the facts and information themselves. The second option known as child-centric classroom proceedings required planning and preparation for creating an uncertainty or a knowledge gap in learners (Jirout, Vitiello and Zumbunn, 2018). There existed no substantive evidences of planning and preparation of lessons by teachers before engaging classes (Tulsyan, 2021). Teachers entered the class without any lesson plan and in most cases without any textbook. Many activities during classroom transaction were indeed, not relevant. Over 60 per cent activities initiated by teachers did not help students learn in grade 3 and 5. Even such activities did not ensure participation of learners across grade.

Questioning either by teachers or students during teaching gave a meaningful pattern. Questioning can be an extraordinary tool of learning. A good question if asked by students reflects the level of curiosity that consolidates the level of understanding. A student's ability to answer question is always appreciated, but more important phenomenon is to ask relevant questions at their own level and seek a comfortable solution of it. It is possible when a student gets optimum level of dissonance during classroom transaction. But how do teachers create such optimum level of dissonance in them? It is a challenge of instructional design. Teachers asked questions during teaching but showed their biasness to the brighter students in order to ensure correct answers from them. They were extra cautious while teaching and hence, showed their best performance during observation. In many cases they taught the old units which they had already covered earlier. Many teachers were found delivering wrong concepts to learners and even a large number had serious problems of articulation. Many of them had problems in pronunciation and accent. Teachers did not find it necessary to read instructions given at the beginning of the textbooks. Some teachers could not recall the number of units of a textbook. The newly recruited mostly young teachers were less professionally competent to manage classroom transaction. They could only somehow learn to manage classes (Sinha, Banerji and Wadhwa, 2016).

Two important dimensions of curiosity need to be discerned, namely, joyous experience and deprivation sensitivity. A student is curious when she/he copes with distress that arises from exploring the novel situation. The study did not find any evidence of the need for exploration by learners. While answering questions teachers did not allow adequate time to think of the situation. They either dismissed the answer or corrected the answer. Students had less space to ask questions in the class. They kept listening to their teachers. When asked any question by students, it did go either unattended or discouraged. The pattern emerged from the analysis suggested that teachers did not practise curiosity-promoting instructional design to the extent it was being expected. Probably, it was a limitation of in-built education system that gave priority to rote learning, exam score and grades measuring for more static knowledge and less understanding knowledge. The in-built education system is based on

performance in the exam that makes students less curious (Hulme, Green and Ladd, 2013). Of late, the blended learning is more encouraged to customize learning experiences. It is yet to witness how much digital technology has benefitted students of the government-run schools. “Digital education cannot substitute for real learning (off-line learning). Teachers feel trapped and enslaved to a system that encourages coaching not teaching. The entire process is disconcerting. Students learn more from each other, while engaging in challenging and collective tasks and thinking together. Staring at a screen or blackboard, learners do not think, question, argue, discuss but only act as remote receptors of what is beamed.... Learning by technology cannot ensure curiosity in learners. IT industry cannot be a substitute for teachers. Curiosity requires some group activities and meaningful work. Education is not about competence but more about motivation (Rampal, 2021, p.22)”. “Education is not just about delivering lessons or filling worksheets, but perhaps more about teacher-student interactions, peer interplay and an experience of a school life which supports development of a range of skills, competencies, and attitudes (Tulsyan, 2021, p.23)”. The findings also reveal that teachers need to create optimum levels of uncertainty in students and allow them to gain self-learning experiences without any fear of being wrong.

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