

Classroom Environment and Quality Delivery in Primary Education: A Study in Muslim Majority Villages of West Bengal

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Abstract

Absence of proper classroom environment hampers the teaching process and affects all students. Various researchers as well as Government agencies have documented the absence of adequate physical infrastructure in Indian primary schools. Typically, such schools are situated at rural areas, at lower caste habitations, at tribal habitations and in poor urban settlements. This paper attempts to describe the selected indicators of classroom environment in the primary schools of Muslim majority villages. Attempts have also been made to identify the factors influencing the classroom environment, and how Muslim parents see the quality delivery issue in those selected schools. Muslims are second largest religious group in India after the Hindus. With help of primary data collected from eight (8) schools, selected through a multi-stage sampling process, the paper have highlighted the factors of high Student Classroom Ratio (SCR), Pupil Teacher Ratio (PTR), historical neglect in provision of infrastructure, inadequate number of teachers and language barriers in the study area. The paper shows that inadequacies in the physical environment are seriously undermining the quality delivery by the teachers in the primary schools in Muslim majority villages. As a result, the learning of all children enrolled in those schools is being hampered.

Keyword: Muslim Children, Primary education, Classroom environment, Quality Delivery, Physical infrastructure

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Background

Beyond the familiar environment of one's home, the elementary school classroom is probably the most important space for a child. He embarks upon the journey of schooling from this place. The school classroom leaves a lasting impression on his / her development. Recognizing the importance of physical environment in the classroom and the school, the World Bank has recently published a report, titled '*The Impact of School Infrastructure on Learning: : A Synthesis of the Evidence*'. The report has emphasized that importance should be given to infrastructural design that foster students' capacity to learn, instead of designing grand educational establishments to impress parents and other stakeholders[1].

Absence of proper classroom environment and other schooling facilities hamper the teaching process and affect all students. However, such absence creates 'double disadvantage' for the students from lower socio-economic background. The failure to provide lower than average quality infrastructure in the school conveys a subtle message. The message is that students from the poor families are valued less than their richer counterparts. By doing so, existing social inequality is reinforced [2].

In India, the National Curriculum Framework (2005) stressed that the school environment should ideally facilitate the self-esteem and self-confidence of learners. The same document noted various problems, which constrained the ability of teachers in Indian schools to help the students to gain self-esteem and self-confidence. Inappropriate school designs and overcrowded classrooms were two such problems [3].

Various independent researchers as well as Government agencies have documented the absence of adequate physical infrastructure in Indian schools. Typically, such schools are situated at rural areas, at lower caste habitations, at tribal habitations and in poor urban settlements. It has been repeatedly pointed out that lack of proper learning environment has placed the children from scheduled caste families, scheduled tribe communities and religious minority groups at a disadvantageous position [4–6]. The economic and educational backwardness of the Muslims, the largest religious minority community in India, has also been documented and discussed in recent past; especially after the findings of Sachar Committee report were made public [7–11].

In this background, this paper attempts to assess the classroom environment in the primary schools located in the Muslim majority villages of West Bengal. Substantial number of Muslim children is enrolled in such schools. Hence, the paper would help to understand how the classroom environment is affecting the learning of the Muslim children in Government primary schools.

Specific Objectives

The specific objectives of this paper are -

1. To describe the selected indicators of classroom environment in primary schools situated in the villages having high Muslim concentration.
2. To identify the factors influencing the classroom environment in primary schools situated in the villages having high Muslim concentration.
3. To assess how the Muslim parents see the quality delivery issue in the selected schools.

Study Area and the Muslim Community

The study was conducted in two districts of the state of West Bengal in India. The total Muslim population in India, as recorded in Census data [12], was 172.2 Million or 17.22 Crore which is 14.23 percent of total population of 1.21 Billion or 121 Crore. This also makes them second largest religious group in India after the Hindus whose population is 966.2 Million or 96.62 Crore.

In West Bengal, Muslim population was 24.65 Million out of total population 91.28 Million while total Hindu population was 64.38 Million. Thus in West Bengal, Muslims constituted 27.01 percent of total population. In rural areas of West Bengal, Muslims constituted 30.8 percent of total population and in urban areas; they constituted 18.9 percent of total population.

As per Censsus 2011 data, Indian Muslims had a literacy rate of 68.5 percent, compared to the national literacy rate of 73.3 percent, Hindu literacy rate of 73.3 percent and Christian literacy rate of 84.5 percent. In West Bengal, literacy rate among Muslims were 68.7 percent in comparision to State literacy rate of 76.3 percent. Female literacy among

Muslims were 64.8 percent in comparison to overall female literacy rate of 70.5 percent.

Methodology

This paper is based on primary data collected directly from the field. Primary data was collected from eight (8) Government primary schools of West Bengal. These eight (8) schools were situated across eight (8) villages of four (4) administrative blocks of two (2) district. The schools were selected through a multi-stage sampling process.

- In the first stage of sampling process, two districts, Uttar Dinajpur and Hugli, were selected on the basis of literacy rate among Muslims of the district in the state of West Bengal. Out of all districts in West Bengal, Hugli had highest literacy rate among Muslims (81.4 percent). Uttar Dinajpur had the lowest literacy rate among Muslims (51.2 percent).
- In second stage, two blocks from each sample district having highest and lowest concentration of Muslim population were selected.
- In the third stage, data from District Information System for Education (DISE) for the year 2016-17 were used to prepare a list of villages where majority students were Muslims. From the list, the 2 villages in each block were selected in a random manner. The schools of the selected villages were sselected as sample schools.

In each school, the data were collected collected by interviewing teachers using a semi-structured questionnaire. Further, 25 Muslim children were selected in random manner from each school. The parents of the the 25 children were also interviewed. Thus 200 Muslim parents were interviewed.

Findings and Discussion

A. Pupil Teacher Ratio (PTR)

Pupil Teacher ratio (PTR) is regarded as an important factor for quality delivery in the school. PTR is defined as the average number of pupils per teacher at a given level of education, based on headcounts of both pupils and teachers. Table 1 shows the PTR for the sample schools and PTR of the Hooghly & Uttar Dinajpur district from DISE data. It was found that PTR of eight (8) sample schools was 29.0 which is generally regarded as an

acceptable rate. In Hooghly, sample schools had PTR of 20.3 while sample schools of Uttar Dinajpur had a PTR of 35.1. It was also found that range of PTR was wider in Uttar Dinajpur than in Hooghly. When compared with PTR for all primary schools of Hooghly (17), Uttar Dinajpur (27) and West Bengal (19), it was found that PTR of sample schools were much higher than district or state average.

Table 1: Comparison of PTRs

Indicators	Hooghly	Uttar Dinajpur	Total
PTR of sample schools	20.3	35.1	29
Range of PTR in sample schools	16.3 – 23.7	20.6 – 68.0	16.3 – 68.0
Standard Deviation (SD) of PTR of sample schools	3.1	20.8	16.8
District Level PTR for Primary Schools (Source : DISE 2016-17)	17	27	-
State Level PTR for Primary Schools (Source : DISE 2016-17)	-	-	19

(Source : Primary data and DISE 2016-17)

Higher PTR in study area than district average and state average implied that teachers faced more difficulty in managing the classroom in study area. Consequently, that would affect teaching quality. Children of Uttar Dinajpur were most affected, because the PTR was highest in study areas of Uttar Dinajpur. A wide range of PTR as well as a high standard deviation of PTR among the sample schools of Uttar Dinajpur implied that that there were certain schools which were affected very badly, and, in certain schools situation was not that bad.

On the other hand, Muslim children in Hooghly were in a far better position. The PTR in sample schools of Hooghly was only 20.3 which was slightly higher than state level PTR. However, a low PTR may not always be translated into an effective teaching environment. We portray the situation of a school of the Hooghly district through a case study which is presented in the Box 1.

Box 1: A low PTR does not always create a good learning environment

The primary school in one of the village of Singur Block of Hugli district was situated in the Muslim neighborhood, not being more than 1 KM away from the mosque. The school had just four rooms. Three rooms were being used as classroom and one as office cum teachers room. With just 38 students, the space was not a problem. The school had only two teachers. That makes the Pupil Teacher ratio just 19 which is not bad at all. Unfortunately, the only female teacher was suffering from the major health issues (related to nerve and muscular system). So, she could come to school most of the days of the week. As a result, the head teacher was left alone to manage all students. He got some support from the women SHG members who cook mid day meal in maintaining discipline, but the teaching had to be managed by the head master only.

On the day of the visit, he was also busy in filling up rows and column of various reports sought by the District Inspector of schools. “Do you think, I can really teach in such a situation, even if I wish? Every day is a challenge for me”- commented the frustrated teacher. Each day, he had to manage everything alone. So he regrouped the students into just two classroom. The other room remains unused.

The situation is equally frustrating for guardians. During household visits, we found a curious case of a boy who went to two schools everyday. The first school is a private school, which is run in the morning. The second school is the Government primary school which we visited.

The mother of the student explained, “ *Oi school te porasona hoyar asha nei. Ekjon teacher ki kore porabe ? Tai onyo school e vorti kore diyechi.*” (“I don’t expect him to learn from the primary school. What can a single teacher do ? So we send him to the private school”).

But everyday, she also sent the child to Government primary school, upon returning from the morning school. Why ? *She confided – “Barite thakle jwaliye mare. Ektu jiriye nite pryonto pari na bujhlen. Tai pathiye di.”* (“He is a menace to manage. If he is in home, I can’t take rest for even for a while. So I send him to this school in the afternoon.”).

B. Student – Classroom Ratio

The classroom is the place where most of the interaction between teacher and child take place. Table shows the student classroom ratio (SCR) of the sample schools derived from primary data. SCR is defined as the average number of students per classroom in the school (s) in a given school year.

The SCR of eight (8) sample schools stood at 30.0. In Hooghly, it was 18.7, and in Uttar Dinajpur it was 39.8. However, there was much variation among the schools. Standard deviation of SCR for all schools was 28.9. In Hooghly, it was only 2.1, and in Uttar Dinajpur, the deviation was 36.7. The highest SCR (102) was found in one school of Uttar Dinajpur.

Table 2: Comparison of Student Classroom Ratio

Indicators	Hooghly	Uttar Dinajpur	Total
Student Classroom ratio (SCR)	18.7	39.8	30
Range of SCR in sample schools	16.3 – 21.3	23.2 – 102.0	16.3 – 68.0
Standard Deviation (SD) of SCR	2.1	36.7	28.9

(Source: Primary Data)

Two reasons are forwarded for such wide range of SCR. First, requirements of classrooms were historically neglected in the study area. It was found that the eight sample schools were established in various period between 1933 and 1979. But, out of 8 schools, only 3 schools had at least four (4) classrooms when the data for this study were collected. The other five schools did not have at least four (4) classrooms. Therefore, there was administrative neglect for providing classrooms in these schools.

The second reason was related to adoption of family size norms among Muslims. To elucidate this reason, block level figures of SCR, and household size, & number of 0-6 year children per household are presented in Table 3. The table shows that Goalpokhor-I, block had highest values of SCR, household size, and number of 0-6 year children per household among all four blocks. Therefore, it was inferred that more number of children resulted in crowding the classrooms in the schools of Goalpokhar-I block.

Interestingly, Goalpokhar-I block also had lowest literacy rates among four blocks. It seems that families living in this low literacy block, continued to have high fertility rate and bigger family size. Higher number of children contributed to crowding the classrooms in Goalpokhar-I block. On the other hand, Muslims households in Hooghly, having higher

literacy, adopted small family norms. This resulted in less number of members per household and less number of children in schools of Hooghly.

At the impact level, a high student-classroom ratio implied challenge for teachers. To manage a crowded classroom and help each of the children was not easy task. The above analysis indicated that teachers faced this challenges most where literacy of parents were already low. Their failure to address these challenges would lead to less learning for the children. Since they might not get guidance at home due to poor literacy and educational status of their parents, chances were high that learning gaps would not be compensated. In long run, the learning gap would affect the teaching process even in the higher classes.

Table 3 : Block and district wise SCR, Household size, and number of 0-6 year children

Indicators	Hooghly			Uttar Dinajpur			Grand Total
	Chandi tala-I	Singur	Total	Goalpo khar -I	Kaliag unj	Total	
Literacy Rate (2011)	83.76	84.07	81.80	42.26	66.50	59.07	76.26
SCR (Sample Schools)	17.1	20.5	18.7	63	24.3	39.8	30
Household size (Sample Households)	5.1	4.8	4.9	6.3	5.3	5.8	5.4
No. of 0-6 Year children per household (Sample Households)	0.5	0.4	0.4	1.2	0.6	0.9	0.7

(Source: Primary Data, and, District Census Handbook (2011) of Uttar Dinajpur and Hooghly)

C. Grouping of grades

If the classrooms are not adequate in numbers, or minimum numbers of teachers are not there in a school, then grouping the students of different standard in same classroom is almost inevitable. In the study area, it was found that-

- In seven (7) out of (8) schools (i.e 87.5 percent) grouping of students of different standards was done to manage the paucity of classroom or teachers.
- Out of 20 teachers, 29 teachers (i.e 69 percent) had to manage the grouped classroom at least once in a day.
- All of the 20 teachers (100 percent) recognized that they faced difficulty in managing grouped students in one classroom.

- Leave of a teacher in case of family emergency or late attendance or early departure due to official works forced other teachers to group the students of different standards temporarily.

The data above reveals that grouping of Classes was common in the schools in the study area, even though PTR and SCR was within acceptable range for most schools barring the schools of Goalpokhar-I block. All the teachers, who had to manage clubbed Classes, accepted that they faced difficulty. Therefore, this practice was detrimental in delivery of quality and learning of the Muslim children.

D. Language barrier

Teacher – student communication is pivotal for the teacher to play her / his role effectively. But language posed as barrier for teachers as well as children in study area. The extent of the problem is shown below in Table 4.

Table 4: Number of students faced difficulty in classroom interaction

Category of the student	Hooghly	Uttar Dinajpur	Total
Face Problem	0 (0)	19 (19)	19 (9.5)
Does not face problem	100 (100)	81 (81)	191 90.5)
Grand Total	100 (100)	100.0%	200 (100)

(Source: Primary Data)

A total of 19 (9.5 percent) students faced difficulty in classroom interaction due to difference between the language spoken at home and medium of teaching. The problem was centered in Uttar Dinajpur only. In Hooghly, students did not face any problem.

The root of the difficulty was found in geographical-cultural context of the study areas in Uttar Dinajpur. Many villages in Goalpokhar – I were situated along the border of Kisanganj district of Bihar. These villages were once part of Bihar. The villages were made part of West Bengal in 1956 following the recommendation of the States Reorganization Commission to restore the territorial links between northern and southern part of West Bengal. It was found that Suryapuri language was spoken in many families residing in villages. Children of Suryapuri speaking parents faced difficulty in understanding Bengali in the school.

It was also found that one of the schools was having Urdu medium section and Hindi medium section apart from Bengali medium section. However, Both Urdu and Hindi medium section had only one teachers and one classroom. Hence, many guardians preferred to admit the students in Bengali medium section. Consequently, these children faced problem in understanding instructions delivered in Bengali. In the other school of Goalpokhor-I block, both the teachers were meant for teaching in Urdu medium, but majority of children speaks Bengali in this village. In both schools of Goalpokhor-I block, teachers used a combination of Bengali, Hindi, and Urdu to teach the children.

The problem of children in Kaliagunj was altogether different. Kaliagunj was close to Bangladesh border. It was found that many families in Tilgaon village spoke in a local dialect of Bengali, which was not understood by teachers even though they belonged to the same district. (In fact, the researcher had to take help of a young girl studying in class VIII to communicate with some of the respondents). Teachers faced difficulty with children of these families as well. Therefore, they had to learn and adopt the local dialect as much as possible. Despite their effort, the children faced difficulty in interaction.

E. Satisfaction of parents regarding school functioning and teacher’s performance

Table 5 shows opinion of regarding school environment and teachers’ performance.

Table E : Opinion of parents regarding school environment and teachers performance

Opinion of parents	No of parents (percent)	
	Regarding school environment	Regarding teachers performance
Satisfied	148 (67.0)	155 (77.5)
Not satisfied	55 (27.5)	37 (18.5)
No opinion	11 (5.50)	8 (4.0)
Total	200 (100.0)	200 (100.0)

(Source: Primary Data)

It was found that 67 percent Muslim parents were satisfied at functioning of school while 27.5 percent Muslim parents were not satisfied at the school environment. On the other hand, 77.5 percent parents said that they were satisfied at teacher’s performance, although 18.5 percent parents were not satisfied at teachers’ performance.

Clearly, the percentage of parents who expressed satisfaction at school environment was less than percentage of parents who expressed satisfaction at teachers’ performance. This implies

that there were many parents who could appreciate the effort of the teachers, as they were aware of various handicaps in which teachers function.

Conclusion

“An optimal physical environment for learning should not be uncomfortable, alienating, and either chaotic or boring”- noted the authors of World Bank report which has been referred at the beginning of this paper. But the realization that learning in the school is closely linked with classroom environment is not something novel which has been discovered very recently. Discussions and efforts on standardization of the physical environment of the classrooms could be traced in the literatures, which were published even eight decades ago [13–15].

The Government of India has set various rules within the framework of the Right to Education (RTE) Act, 2009, to provide educational opportunities to all children aged 6-14. The Governments at Central and State level has taken various steps to address the situation. Systematic collection of data regarding enrollment of Muslim children under the District Information System for Education (DISE) and provision of scholarships for Muslim children are two such examples. The pumping of huge financial resources through programmes like Sarva Siksha Abhiyan (SSA) and has improved the physical infrastructure of the school and classrooms. Yet, as described in this paper, inadequacies in the classroom environment are seriously undermining the quality delivery by the teachers in the schools having substantial number of Muslim children. As a result, the learning of all children enrolled in those schools are getting hampered.

In the light of above discussion, three (3) concrete suggestions are hereby forwarded. First, the schools with high PTR should be identified using DISE data. Initiative should be taken by Government to place teachers in the schools with high PTR. Second, a computerised database should be prepared to store the data of all teachers in the primary schools in the state. The data should include the age, retirement date, and transfer records of the teachers. Advance planning should be done using the database for recruitment of new teachers or transfer of existing teachers with objective of providing required number of teachers at each school. Third, schools having high SCR should be identified using DISE database. Initiatives should be taken to construct classrooms in such schools on emergency basis. We believe that these actions would help to improve the physical aspects of the classrooms in the primary

schools. The government should seriously consider the improvement of classrooms environment at government primary schools.

Conflict of Interests:

The authors declare no conflict of interests. Name of the schools and villages has been withheld to keep the identity of the teachers confidential.

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