

The Impact of Seating Arrangement on Students' Learning in Secondary

Schools

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ABSTRACT

This dissertation illustrates about the existing seating arrangements in the schools of Bangladesh which are believed to play a constructive role in fostering students' learning in the classrooms. By investigating from the perspectives from the teachers and the students, this research exposes the present conditions of the seating arrangements that decrease the quality of teaching and learning in most of the schools. To sum up, collaboration among the teachers, school authority, education board and the government is needed to improve the seating arrangements in schools for utilizing effective teaching and learning practices.

1.1. Introduction

Seating arrangement is an important factor in the classroom setting because it can contribute to both positive and negative impacts on classroom teaching and students' learning. From the hypothetical research, it has been found that effective communication among the teachers and students in the classroom is the key to their success in effective teaching and learning (McCorskey and Mcvetta, 1978, p. 99). Proshansky and Wolfe (1974) illustrated that, "Learning is a dynamic process and the utilization of physical space should be an echo of that process" (p.562). McAndrew (1993) believes that, through research about classroom ecology associated with seating arrangement, we can understand how the classroom environments affect the students and their interaction with the teacher and the other students.



Since, classroom interaction involves the learning and participation of the students in the lessons and activities, certain seating patterns may facilitate or restrict the interaction among the students and the teachers. For example, traditional seating arrangement in rows is a teacher – centered seating which seems to minimize distractions among students and facilitate independent work, tests and lecture notes. The semi – circular seating arrangement is both a teacher – centered and student – centered seating which facilitates whole class discussion. On the other hand, the modular seating arrangement is a student – centered seating which facilitates small group discussions and Cooperative Learning (Partin, 2009, p.04). In this way, the seating arrangement can affect the level of interaction between the teacher and the student by facilitating specific activity patterns in the classroom (Wineman, 1986, p.12). Moreover, it also has the potential to encourage desirable behavior, contribute to students' misbehavior and even assist or impede classroom teaching (Daniels, 1998, p.30).

If the seating arrangement can be organized properly then it will create a purposeful setting for learning and teaching that will affect and motivate the teacher and the students. Therefore, proper seating arrangement needs to be organized so that there is no obstacle in students' learning. This research attempts to find out the how different seating arrangement in the secondary schools, can increase student' learning, participation and interaction in the classroom and facilitate classroom management.

2.1. Seating Arrangement and Classroom Setting

McCorskey and McVetta (1978) pointed out that, effective communication in the classroom is essential to the success of both the student and the teacher. They noted that, "The kind of communication as well as the amount of communication that occurs in the classroom has long been thought to be partially a function of the seating arrangement" (p. 99). Wineman also (1986) believes that, "the physical environment provides physical facilities and spatial arrangements that aid specific activity patterns" in the classroom. He also added that within these physical environments, people may rearrange the furniture or lighting to suit their needs (p. 08). As defined by Cornell (2002), "Furniture is both tool and environment".



He explained that thinking of furniture and seating arrangement is important in creating a suitable learning environment for students (p. 33).

Therefore, it is important that thought and planning be given to the way in which the space and the furniture in it are utilized if the physical space is to play a constructive role in the learning process (Proshansky and Wolfe, 1974, p. 565). In different types of seating arrangements, it is considered that the individual desks or seats gives more flexibility than large desks or benches as it allows for easy rearrangement and groupings for different lessons (Denton, 1992, p.30). However, there cannot be one ideal arrangement even for a single classroom, since we are always dealing with changing needs and changing people (Proshansky and Wolfe, 1974, p. 565). As concluded by Jones (1987), "The best arrangements put the least distance and the fewest barriers between teacher and students. No matter what seating arrangement is used, it must be flexible" (p.58).

2.2. Types of Seating Arrangements

An ongoing challenge for teachers in the classroom is gaining and keeping students' attention, which can be only managed by the favorable seating arrangements that can help make this task easier (Denton, 1992, p.32). In *The Everything New Teacher Book*, Kelly (2004) acknowledges that, all students' performances in the classroom are affected by the placement of the desk in the classroom (p.76). For example, seating arrangement in rows can help the students not to talk to classmates and listen to the teacher which increases the teacher – student interaction. Similarly, seating arrangements in groups can help students make connections and friendships with other students in the classroom which increases the student – student interaction. According to McCorskey and McVetta (1978) there are three main types of seating arrangements:

- 1. The Traditional Seating Arrangement in Rows.
- 2. The Horseshoe or Semi Circular Seating Arrangement.
- 3. The Modular Seating Arrangement. (p. 103).



2.2.1. Traditional Seating Arrangement in Rows

Typically, the traditional row arrangement for classrooms consists of about five or six perfectly straight rows, each containing five to seven chairs equidistant from each other. Historically, Sommer explains, that the straight – row arrangement evolved to make the best use of the adequate lighting (McCorskey and McVetta, 1978, p.100). Also, the teacher is the primary focus in the traditional arrangement (McCorskey and McVetta, 1978, p. 103). If the purpose of the class is primarily to spread information by the teacher among the learners, then the traditional arrangement is probably best because it minimizes student – student interaction and places the primary focus in the classroom on the teacher (McCorskey and McVetta, 1978, p. 103).

Partin (2009) has stated that, the traditional seating arrangement in rows has lasted long because it is very functional for various classroom purposes. In this arrangement, the teacher can monitor the students' behavior easily and minimize distractions as there is distance between the students.

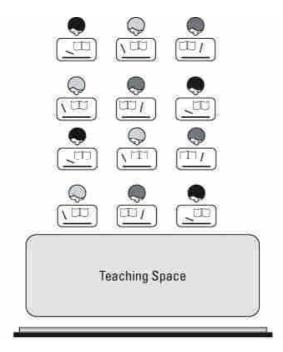


Figure 2.1: Traditional Seating Arrangement in Rows (Kelley, 2003).

Moreover, this arrangement produces higher levels of on – task behavior that facilitates independent



seatwork, lecture and tests etc. (p.03).

2.2.2. Semi – Circular or Horseshoe Seating Arrangement

The semi – circular or horseshoe arrangement another type of arrangement which is frequently employed in smaller classes, such as seminar type classrooms. Some rooms are not physically conducive to this arrangement such as the larger classes because of the "dead space" in the middle. Consequently a "double horseshoe", two semi – circular rows with one inside the other in large classes is also frequently observed (McCorskey and McVetta, 1978, p.100). Primarily, both the teachers and the students share the focus in the horseshoe arrangement (McCorskey and McVetta, 1978, p. 103).

According to Partin (2009), the semi – circular seating arrangement is suitable for facilitating student – student interaction with whole class or group discussions (p.03).



Figure 2.2: Semi – Circular Seating Arrangement (Kelley, 2003).

2.2.3. Modular Seating Arrangement

As described by McCorskey and McVetta (1978), the modular arrangement is found mostly in specialized classrooms and in classrooms at the lower elementary school levels (p.100). In this arrangement, the teacher is removed from the focal point in the modular arrangement (p.103).



According to Harmer (2007), the modular seating arrangement works best for student – student interaction and group activities (p. 22). Partin (2009) also asserts that the modular seating arrangement facilitates group interaction such as small group discussions and cooperative learning (p.03).

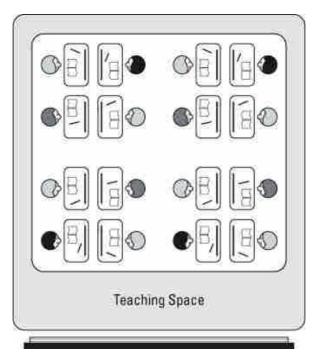


Figure 2.3: Modular Seating Arrangement (Kelley, 2003).

The modular arrangement is advocated for classes in which student – student interaction is most important. If task groups are formed in the class, this arrangement permits maximum interaction among those groups while minimizing the interference of one group with another. This arrangement is also recommended for classes which require that the teacher work closely with individuals or small groups rather than primarily with the class as a whole (McCorskey and McVetta, 1978, p. 103).

3.1. Research Design

The research design followed by the researcher was both qualitative and quantitative which provided different perspectives of the research and usually complemented each other. The qualitative research method was exploratory and provided the insights into the setting of the research and provided further suggestions. The common data collection method used for this method was interviews and discussion



with the teachers with individual interpretation on the analysis. On the other hand, the quantitative research method was used to quantify data and generalize results of the students' opinions. In this method, the data was collected through sample survey questionnaires.

3.2. Sampling and Setting

The sample used in this study consisted of randomly selected 12 teachers and 120 students from six different government and non – government secondary schools of Bangladesh. The subjects of this study were the secondary level students of class 9 from the English classes of the Bengali medium schools.

4.1. Results of Students' Surveys in Schools

Table 1: Average percentage of results on basis of students' answers for survey Question No. 1: Which do you consider as the most important for your seating arrangement in the classroom? You can choose more than one option.

Response of	Option a:	Option b:	Option c:	Option d:	
Students	The size of the	Space between	Distance from	Space for	
	writing surface	desks	the teacher	keeping books,	
				copies etc.	
School 1	60%	55%	60%	65%	
School 2	60%	40%	50%	30%	
School 3	40%	55%	20%	75%	
School 4	30%	30%	15%	100%	
School 5	30%	20%	45%	55%	
School 6	65%	10%	40%	75%	

In this first question, the students were allowed to choose more than one correct option, so their opinions were divided among the four options which was individually measured and averaged. From the overall students' opinions it was seen that 47.5% of the students considered the size of the writing surface an important factor, 35% of the students considered the space between desks as an important factor, 38.3%



of the students considered the distance from the teacher an important factor and 66.6% students consider the space for keeping books, copies as an important factor.

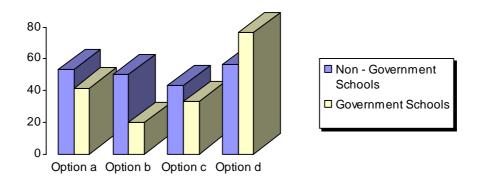


Figure 4.1: Factors considered important for the Seating Arrangement.

From the comparison between the students of non – government and government schools, it is found that 53.3% non – government and 41.6% government school students considered the size of the writing surface, 50% non – government and 20% government school students considered the space between desks, 43.3% non – government and 33.3% government schools students considered the distance from the teacher and 56.6% non – government and 76.6% government school students considered the space for keeping books, copies as the important factors of the seating arrangement.

Table 2: Average percentage of results on basis of students' answers for survey

Question No. 2: Can you see your teacher and the blackboard clearly from your seat?

Response of Option a:		Option b:	Option c:	Option d:		
Students	Often	Sometimes	Seldom	Never		
School 1	95%	5%	0%	0%		
School 2	100%	0%	0%	0%		
School 3	School 3 80%		0%	0%		
School 4	75%	15%	10%	0%		
School 5	85%	15%	0%	0%		
School 6	90%	10%	0%	0%		



Overall, 87.5% of the students said that they often see the teacher and the blackboard clearly from their seats, while 10.8% students said that they sometimes see the blackboard. On the other hand, 10% students said that they seldom see the blackboard and no one said that they never see the blackboard.

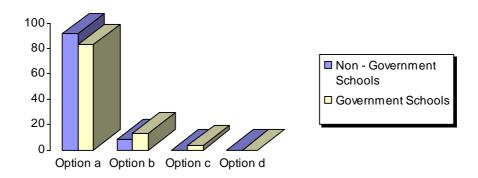


Figure 4.2: Visibility of the Blackboard in Classroom.

From the comparison between the students of non – government and government schools, it is found that 91.6% non – government and 83.3% government school students could often see the teacher and the blackboard clearly from their seats, 8.3% non – government and 13.3% government school students could sometimes see the blackboard, 0% non – government and 3.3% government schools students could seldom see the blackboard. However, 0% students from both the schools said that they never see the blackboard from their seats.

Table 3: Average percentage of results on basis of students' answers for survey

Question No. 3: Do you have enough lights, fans and ventilation in your classroom?

Response of	Option a:	Option b:
Students	Yes	No
School 1	100%	0%
School 2	100%	0%
School 3	100%	0%
School 4	95%	5%
School 5	40%	60%
School 6	60%	40%



On the whole, 82.5% students answered that there was enough lighting and ventilation in their classroom and 17.5% students said that there was not enough ventilation in their classroom.

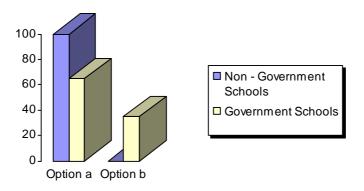


Figure 4.3: Lighting and Ventilation in Classroom.

From the comparison between the students of non – government and government schools, it is found that 100% non - government school students said that there was proper lighting and ventilation in their classrooms, compared to 65% government school students who agreed. However, 35% government school students commented negatively about the lighting and ventilation in contrast to 0% non - government school students.

Table 4: Average percentage of results on basis of students' answers for survey Question No. 4: Do you enjoy the pair work or group work seating more than individual seating in the class?

Response of	Option a:	Option b:
Students	Yes	No
School 1	90%	10%
School 2	75%	25%
School 3	80%	20%
School 4	95%	5%
School 5	100%	0%
School 6	80%	20%

In this question, 86.6% students said that they enjoy pair or group work setting more than individual



seating, while 13.3% answered that they do not enjoy the pair or group seating more than the individual seating.

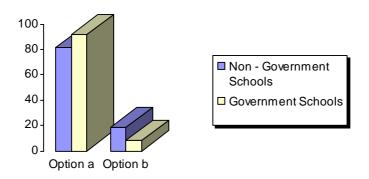


Figure 4.10: Preference for Pair – Group Work or Individual Seating.

From the comparison between the students of non – government and government schools, it is found that, 81.6% non – government and 91.6% government school students said they enjoy working in pairs and groups. However, only 18.3% non – government and 8.3% government school students said that they enjoy working individually more than pairs or groups with others.

Table 5: Average percentage of results on basis of students' answers for survey Question No. 5: Do you think that you can learn and participate better in pair and group works?

Response of	Option a:	Option b:
Students	Yes	No
School 1	95%	5%
School 2	95%	5%
School 3	85%	15%
School 4	100%	0%
School 5	100%	0%
School 6	100%	0%

In this question, 95.8% students answered that they learn and participate better in pair and group works, while 4.1% students answered that they do not participate better in pair and group works.



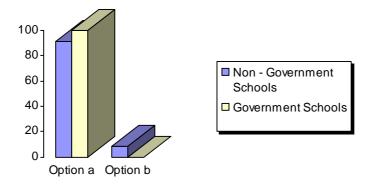


Figure 4.13: Better Learning and Participation in Pair and Group Works.

From the comparison between the students of non – government and government schools, it is found that, 91.6% non – government and 100% government school students think, they learn and participate better in pair and group works. Only 8.3% non – government school students think they do not learn better in pair and group works in class.

Table 6: Average percentage of results on basis of students' answers for survey Question No. 6: Choose the seating arrangement from the following picture you like most?

Response of	Response of Option a:		Option c:		
Students	Row Seating	Semi – Circular	Modular		
	Arrangement	Seating	Seating		
		Arrangement	Arrangement		
School 1	0%	65%	40%		
School 2	55%	45%	15%		
School 3	35%	50%	30%		
School 4	25%	30%	65%		
School 5	35%	20%	45%		
School 6	60%	25%	15%		

In this question, the students were allowed to choose more than one correct option, so their opinions were divided among the three options which was individually measured and averaged. It was seen that 39.1%



of the students liked the semi – circular seating arrangement and 35% students liked the modular seating arrangement and 35% chose the option of the row seating arrangement.

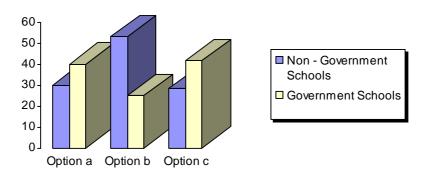


Figure 4.15: Preference of Choices among the Three Seating Arrangements.

From the comparison between the students of non – government and government schools, it is found that, 53.3% non – government and 25% government school students liked the semi – circular seating arrangement, 30% non – government and 40% government school students liked the modular seating arrangement and 28.3% non - government and 41.6% government school students liked the row seating arrangement to be used in their classrooms.

4.2. Results of Teachers' Interviews in Schools

Responses of the teachers on basis of the teachers' interview questions.

Question No. 1: Is seating arrangement a factor that is usually under the teacher's control or should the students be allowed to choose their own seats in the classroom?

The teachers from the non – government school said that, seats should be fixed according to the height, size and interest of the students as there are both large desks and individual seats in different classes. The seats also need to be assigned in a way so that the weaker student may come forward and the good student may change seat for the need of the weaker student. A teacher from the non – government school said that there is a seating chart in the classroom where seats are assigned by numbers for the students, so this



asserts the control of the teacher over the seating arrangement of the classroom. If the other teachers find that any student have changed his/her seat, then they could easily rearrange that student's seat as assigned by the seating chart.

The government school teachers also agreed and said that the seating should be solely organized by the teachers and the students should not be given any chance of changing their seats without the permission of the subject teacher or the class teacher. A teacher from the government school suggested that, if there is a mixture of different types of students in a group seating, then the good students could help others who are less intelligent and this grouping could work better and students will be benefited from that seating arrangement. She advised that, the teacher should arrange and change the seating at times according to the situation, but students' needs should also be given priority. She also pointed out that, the good students will always try to sit together and the ill-disciplined students will always try to sit together which will create chaos. Moreover, tall students might try to seat in front and short students might fall in the back which could have negative impact in their learning. So, choosing the seats are under the control of the teachers in the government and non – government schools.

Question No. 2: What type of classroom seating arrangement do you prefer for your students?

The teachers from the non – government school said that time has changed, so individual seats should be arranged in classrooms instead of large desks, because in this seating all the students are visible to the teacher. Since large desks make it difficult to rearrange the seats in the classroom, the individual seats are better because they could be rearranged easily which is necessary for group and pair works. Also, with one bench forward system, students can sit in the front, middle and back which keeps them interested.

Most of the government school teachers all agree on the use of the individual desks in classrooms instead of large desks. However, a few teachers from the government school said that since they do not have much room and the students are large in number, the school cannot provide single seats and since the



number of teachers is less compared to the number of students, so large desks are better. Maybe, the arrangement of seating can be different, but it would be better to decrease the number of students and increase the number of the teachers and sections of classes, otherwise nothing will work, because it is not possible for a teacher to single – handedly manage the large number of students in a classroom.

Question No. 3: Does the classroom seating arrangement facilitates your preferred style of teaching, instructions and meet your teaching needs?

The teachers from the non – government school said that, the lecture or presentation teaching style is effective and communicative as students feel comfortable in their work, feels free to ask questions and give opinions. In contrast, in the seminar or discussion style, sometimes students do not understand what the teacher is speaking. It is because they do not understand every word that the teacher is saying in English, but this problem could be solved if the number of the students is less around 20 – 30 in each class. They suggested that the teacher should use soft words and easy English and avoid strong words to create interest and communicate with the students. Moreover, in group works, the teacher should use the discussion style and conduct dialogue topics effectively by resizing the 45 minutes' plan as given in the book to a 35 minutes plan for managing efficient group activities. If the teacher can rearrange seats in the classroom according to the teaching style, then the teaching will be more fruitful.

In contrast, the government school teachers said that, the seating arrangement in their schools do not facilitate their style of teaching, so they see if the students understand their lectures and feel free to ask questions or give opinions in the class or not.

Question No. 4: Does the seating arrangement in your classroom facilitate group work, participation and interaction among the students?



The teachers from the non – government school said that the seating arrangement of their classes facilitate group work, participation and interaction among the students. For this reason, they make group and pair works for discussions, but not large groups since it could create chaos. One teacher said that she even carries out chain drills in her class to increase student interaction. In classes where there are large desks instead of individual seats, the teacher tell the students to make a group of 8 in two benches and then turn around their benches to sit face to face for group discussions. All of the teachers suggested that in order to conduct effective group works in the existing seating arrangement, each category of students need to be gathered in different groups. In this way, the weak student will get the opinion of the bright students and there will be good cooperation and discussion among them. It is seen that sometimes, the bright students can explain better than the teachers to other students and it works best in individual seat grouping than large desk grouping.

In contrast, the government school teachers said that, there are large desks or benches in most of the government secondary schools and this system is not good and flexible for doing group or pair works. However, they still try to do some group works by turning around the large desks and make students sit face to face, so that they can participate and discuss in group activities led by the teacher. The teachers pointed out that in the English language classes, the teacher need to work with the four skills, so group work is much needed.

Question No. 5: Does your students feel comfortable in moving around the classroom or do they feel that the environment of the classroom is overcrowded and congested?

The non – government school teachers said that, their classrooms are large and spacious enough for the students to move around the classroom. However, it sometimes becomes congested when the teachers ask the students to form groups and there is chaos, however, it is temporary, but that is also important because they get to discuss.



Most of the government school teachers said that their classrooms are large enough to accommodate the limited number of students, so they can move comfortable around the classroom even though they are overcrowded. It is usually because of the large desks that the students sometimes have problems moving around the classroom comfortably. Moreover, if the classrooms are clean, then the teacher and the students will get a good learning environment.

Question No. 6: What are the effects of the traditional seating arrangement on the learning output (language comprehension, ability to generalize, language production etc.) of your students?

The non – government school teachers said that, in the traditional seating arrangement, the teachers use the Communicative Language Teaching method along with the Grammar Translation Method to create a balanced teaching – learning environment for the students so that they are interested to learn and use English in classes. Moreover, they use group and pair works to facilitate and encourage the students to try use English during the class. They pointed out that there is lacking in the learning output of the students who usually sits at the back. So, in order to improve the language production of the students, they suggested that the teachers should use the Communicative Language Teaching method and try to speak in English to encourage the students to speak. However, the teacher also needs to use the Grammar Translation Method sometimes by translating to mother tongue from English for the advantage of the weak students so that they can receive the information that the teacher is trying to provide them.

Similarly, the government school teachers said that, students try to speak in English when they give them group or pair works, otherwise, they are not that much vocal in English. However, the traditional seating arrangement always does not inspire the students to get proper language production. They suggested using easy English for the students in English classes instead of trying to use Bengali when the students find any lesson or instruction difficult to understand.



Question No. 7: Do you think that the semi – circular and modular seating arrangements are suitable for the improvement of students' learning?

Both the teachers from the non – government and the government schools agreed that, the semi – circular and modular seating arrangements can be suitable for the improvement of students' learning because in these arrangements students will be interested and get chance to participate with each other and the teacher. This will also help the teachers to implement the Participatory Method more effectively that will encourage active participation from the students. Besides, all the students will get equal attention from the teacher, take part in discussion and be active in class through these arrangements. They said that they can try the modular seating since the student number is large and the semi – circular seating if there is less student percentage in the classes. However they emphasize that, the present lacking of classroom space and the increasing numbers of students are not suitable for implementing those seating arrangements in the classrooms of Bangladesh. However, if there is enough space and classrooms in future, then these arrangements can be put into practice in the schools.

Question No. 8: What steps do you think that the government secondary schools should take to overcome the problems of the increasing number of students in the overcrowded classrooms?

To overcome the problem of the increasing number of students in the government secondary schools, the non — government school teachers suggested several ideas. They suggested that the government secondary schools should try to accommodate their students even though more space cannot be managed to make the classroom bigger. Otherwise, the school authority could limit the number of students to 50/60 in each class and not increase the number of students. Besides, the government can finance these schools to create more classrooms and increase the number of sections so that the number of the students can be kept to a minimum number.



Agreeing with them, the government school teachers also said that, the number of classes for the teachers is more compared to the number of students which is very large and the number of classrooms is small which creates problem for the seating. They suggested that the government schools should increase the size or the number of the classrooms, maintain a limited number of students and employ teachers who could control and monitor the classes successfully. Moreover, they can also maintain a limited number of students by increasing the number of schools and the posts of the teachers, then the teachers will be able to give attention to students, implement their teaching methods and make them fruitful. If there are more teachers, then the classrooms can also be divided into sections which will help to decrease the number of students in every classroom.

However, they suggested that, it would be more effective if the idea of team teaching is implemented in classrooms, this can be easily done if the government increases the posts of the teachers which can improve the teaching – learning situation in schools. They emphasized that, if the plans of classroom management can be designed with the coordinated efforts of the curriculum, syllabus committee and the school authority and teachers are encouraged to use creative and structural teaching style then they will contribute to enhancing students' learning.

5.1. Summary of the Findings

The data obtained from this research highlights a number of points concerning the viewpoints of both the teachers and students of the government and non – government secondary schools regarding different aspect of seating arrangements. Although, the existing row arrangement does not fully encourage the Communicative Language Teaching, Participatory Teaching method, cooperative learning activities, group and pair works, the teachers are still trying to use this arrangement for meeting the demand of their teaching methods and also enhancing students' learning and participation in class. Alternatively, they are trying to conduct group and pair works in the form of the semi – circular and modular seating arrangements in the existing traditional seating arrangement in the classrooms.



5.2. Recommendations

The teachers recommended that in order to support successful teaching and learning in the classroom seating arrangements of the schools, ongoing collaboration is needed among the government, education board, school authority, teachers, education planners and education researchers of the country. In fact, as emphasized by the teachers from both government and non – government schools, different seating arrangements should be available for them so that they can contribute entirely to students' learning. Also, good administrators need to be employed for improving the existing condition of the government schools. Besides, the traditional classroom environment needs to be changed by providing modern facilities in the classrooms.

The teachers also recommended that the students should not be given any chance of changing their seats without the permission of the subject teacher or the class teacher. Some teachers also advised that in order to overcome these challenges, the teachers need to attend the Teachers' Quality Improvement Training which will teach them to monitor and manage overcrowded classrooms. They illustrated that, in this training, the teachers are given criteria on CLT which emphasizes that the teacher will never say the answer, but encourage and monitor to elicit answer from the students.

6.1. Conclusion

In conclusion, it could be illustrated that, the teachers and students do have much to do in the present situation apart from accepting the row seating arrangements in the schools, but thinking about improving them can bring about a change in the teaching and learning situation in the schools of Bangladesh. At present, the function of seating arrangement is underestimated by the school authorities as they are more interested to have maximum number of seats in order to have maximum number of students so progression is much needed.



Therefore, shortages of classrooms and teachers and other necessities in the secondary schools of our country need to be addressed by the school authority, education board and the government. As suggested by most of the teachers, a lasting solution can be building additional classrooms and employing more teachers so that this crisis can be overcome. It has to be remembered that whatever prevailing seating arrangement is in the schools or in

the majority of the classrooms in a country, it has far reaching implications for teaching and learning environment in schools. Therefore, seating arrangement should be taken into consideration for utilizing effective teaching and learning practices for both the teachers and the students.



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Appendix A

Classroom Interview Questionnaire (Teacher)

This assessment contains statements and questions about the seating arrangement of the class and the activities that take place in the class.

- 1. Is seating arrangement a factor that is usually under the teacher's control or is the students allowed to choose their own seats in the classroom?
- 2. What type of classroom seating arrangement do you prefer for your students?
 - a. Individual seats with attached writing surface (wooden palettes).
 - b. Large desks for 5-7 students in a row seating pattern.
- 3. Does the classroom seating arrangement facilitates your preferred style of teaching, instructions and meet your teaching needs?
- 4. Does the seating arrangement in your classroom facilitate group work, participation and interaction among the students?
- 5. Does your students feel comfortable in moving around the classroom or do they feel that the environment of the classroom is overcrowded and congested?
- 6. What are the effects of the traditional seating arrangement on the learning output (language comprehension, ability to generalize, language production etc.) of your students?
- 7. Do you think that the semi circular and modular seating arrangements are suitable for the improvement of students' learning?
- 8. What steps do you think that the government secondary schools should take to overcome the problems of the increasing number of students in the overcrowded classrooms?



Appendix B

Classroom Assessment Survey (Student)

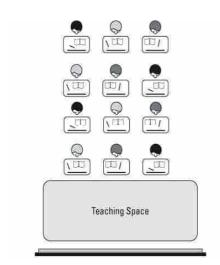
This survey contains statements and questions about the seating arrangement of your class and the activities that take place in your class. There are no right or wrong answers. Some of the statements and questions may be similar. Please answer all of the following questions in this survey. Thanks!

1. Wh	ich do you	consider	as the n	nost impo	ortant f	or you	ır seat	ing ar	rangeme	ent in t	he class	room?	You can
choose	e more tha	n one opt	ion. (নীব	ের		আসন	-বিনাসের		ζ		কান	বিষয়	
তামার	কাছে স	বচেয়ে	গুরু পূণ		? ভুমি	এব	চ র	বশি	উ র	বছে	নিতে	পারো	1)
a.	The size	of the wr	iting sur	face. (আসনে	ার উ	পরে	লথার	জায়গ	ার :	মাপ)			
b.	Space be	tween de	sks. (দুই	আসলের	মধ কার		জায়গা)					
c.	Distance	from the	teacher.	(শি ক	থকে	দূর)					
d.	Space for	r keeping	books,	copies etc	C.(বই -পু	<u></u> Φ	রাখা	র	যথে	জায়গা)		
2. Can	you see y	our teach	er and th	ne blackb	oard cl	early	from y	our se	eat? (ভুমি	কি	তামার	আসন	থকে
তামার	শি ককে	এবং	াকবোড		পরি	ারভাবে			দখতে	পারো	?)		
a.	Often.(ায়ই)											
b.	Sometime	S. (মাঝে	মাঝে)										
c.	Seldom (I	0000)											
d.	Never.(কথনই	ল)											
3. Do	you have e	enough lig	ghts, fan	s and ven	ntilation	n in yo	our cla	ssroo	m? (তামাঃ	a	नीका		
যথে	<u> পরিমান</u>	লাইট	, ফ াল	এবং ব	गास ूहला	চ লে র	ব	াৰ া	ত	মাছে ?)			
a.	Yes. (হ†)											
b.	No. (না)												
4. Do	you enjoy	the pair v	vork or §	group wo	rk seati	ing m	ore tha	an ind	ividual	seating	in the	class? (ছ	্মি কি
এককভাবে	বসে	কাজ করার	ь स्य	প	অথবা	প্যাত্ত	র	কাজ	কর(ত	বশি	পছ	করো ?)
a.	Yes. (₹Ť)											
b.	No. (না)												
5. Do	you think	that you o	an learn	and part	icipate	bette	r in pa	ir and	group v	works?	(তুমি	কি মনে	করো
প্যার	বা প	কাজে	তুমি	বশি	ান	অজন	এব	ং আলে	ग्रह्माःस	অংশ হণ		কর ত	পারো ?)
a.	Yes. (इाँ)											
b.	No. (না)												

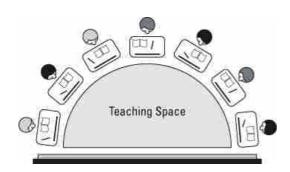


6. Choose the seating arrangement from the following picture you like most? (নিচের কাল আসন

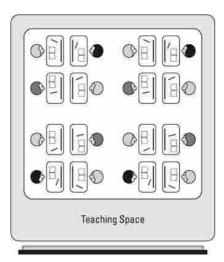
ববা ভামার সবচেয়ে বশি পছ ?)



a) Row Seating Arrangement. (সারিব আসনবিন সে ববা



b) Semi – Circular Seating Arrangement. (অধ -ৰু কোর আসলবিল সে বৰা



c) Modular Seating Arrangement. (দলব আসনবিন সি ব ব া

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