

**APPRAISAL OF PHYSICAL ENVIRONMENT OF INCLUSIVE  
SCHOOLS FOR CHILDREN WITH HEARING IMPAIRMENT  
IN MYSORE**

R Rajashekhar Goud

Registration No. 13MSD003

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Mysore.



**All India Institute of Speech and Hearing**

Manasagangothri, Mysore-570006

May 2014.

## **CERTIFICATE**

This is to certify that this dissertation entitled '**Appraisal of Physical Environment of Inclusive Schools for Children with hearing Impairment in Mysore**' is a bonafide work in the part fulfilment for the degree of master of special education (Hearing Impairment) of the student Register no. 13MSD003. This has been carried under the guidance of a faculty of this Institute and has not been submitted earlier to any other university for the award of any diploma or degree.

Mysore  
May, 2014

**Dr. S. R. Savithri**  
**Director**  
**All India Institute of Speech and Hearing,**  
**Manasagangothri, Mysore - 570006.**

## CERTIFICATE

This is to certify that this dissertation entitled '**Appraisal of Physical Environment of Inclusive Schools for Children with hearing Impairment in Mysore**' of the student Register no. 13MSD003 has been prepared under my Supervision and guidance. It is also certified that dissertation has not been submitted earlier to any other university for the award of any diploma or degree.

Mysore  
May 2014

Guide:  
**P.Vijetha**  
Lecturer in Special Education  
All India Institute of Speech and Hearing,  
Manasagangothri, Mysore - 570006

## DECLARATION

This is to certify that this master's dissertation entitled '**Appraisal of Physical Environment of Inclusive Schools for Children with hearing Impairment in Mysore**' is the result of my own study and has not been submitted earlier to any other university for that award of any degree or diploma.

Registration No. 13MSD003

Mysore  
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## CHAPTER I

### INTRODUCTION

Education is a process which enables an individual to realise his strengths and understand limitations. It is a tool which helps one to create one's own identity leading to independent living and contributing productively in the society. The place where formal education takes place is termed as 'School'. It is an important place of learning as the child spends most of his life's foundation years. School environment must be comfortable to the child. The school environment must be shaped in such a way to support the effort of the teacher, but above all, it must be designed to stimulate and support the efforts of the children with special needs (Birch and Johnstone, 1975). The schools where classrooms are impoverished due to lack of sunlight and air, unsuitable furniture, noise cannot lay good foundation for learning. The classrooms and the schools need to be given special attention. The Physical environment of the classroom is not determining factor in children's learning, but it can enhance or limit learning (Lorton 1979).

The philosophy of Inclusive education has grown from the belief that education is the basic human right. All learners have a right to education, regardless of education of their individual characteristics or disabilities UNESCO (2003). Inclusive education is concerned with removing all barriers to learning. Inclusive education challenges the prevailing system in terms of physical environment, human resources and curriculum, teaching and learning materials, attitudes etc.

The Education for All (EFA) movement was launched at the World Conference on Education for all in Jomtien, Thailand in 1990 which aims to give all children, young people and adults the right to education. India being a part of the movement has launched many programmes to provide education for all and one such programme is Sarva Shiksha Abhiyan (SSA). In order to achieve the goals of Universalization of Elementary Education (UEE), the



Government of India has launched Sarva Shiksha Abhiyan in 2002. India signed for The United Nations Convention on the rights of persons with disabilities (UNCRPD) in 2007 and implementation of Right to Education Act 2009, highlights the importance of education to be provided to children in general and children with special needs in particular.

In recent times, every school is open for enrolment of children with special needs. Many children with special needs have been attending to regular schools in the name of inclusive education in India. However, the implementation has been only in terms of physical inclusion of children with special needs in regular schools and whether the teachers teaching these children are prepared and equipped with necessary knowledge and skills as per their needs and availability of infrastructure are questionable. Singal (2006) contends that in India, Inclusive education is understood and practiced differently from the western world. In fact, there is a tendency to be 'politically correct' by taking on current trends in the west without a real or common understanding of their meaning, resulting in dilution of service quality (kalyanpur, 2008). Ideally 'Inclusive education means attending the age appropriate class of the child's local schools, with individually tailored support' (UNICEF 2007).

### **Need for the Study**

Research on the process and efficacy of inclusive education in India is scarce. In a qualitative study by Das & Kattumuri (2010) 'Children with disabilities in private inclusive schools in Mumbai: experiences and challenges' contends that 'Inclusive education' policy has been introduced in India, however the concept is in its infancy.

In India, Inclusive education is being implemented without any strong foundation in terms of preparation and providing resources. In practice, it can be seen that on one side there is lot of pressure to promote inclusive education but on the other side the appropriate physical environment, the barrier free environment needed for children with hearing impairment is hardly been provided. If Inclusion has to be successful, there are certain essential components

like attitudinal changes of teachers, administrators and the community, improving the teachers with necessary skills & knowledge and also providing barrier free environment.

The influence of physical environment in Inclusive schools needs to be assessed from time to time in order to improve and sustain its quality. Hence, an appropriate approach is required that would lead to suggestions for improvement. Assessment of physical environment helps the school to know their areas of strengths and weaknesses which in turn helps the school personnel to identify the areas where improvements can be made. It helps in making requests for more resources to be granted accompanied by evaluative evidence. It also helps in making inclusive schools good places for teaching- learning attitudes.

Therefore, the need was felt by the investigator to assess the physical environment of Inclusive schools for children with hearing impairment in Mysore.

### **Aim of the Study**

The present study is intended to assess the physical environment of inclusive schools for children with hearing impairment in Mysore and to determine the areas of improvement.

**Operational definitions** – The following are the key terms that are defined to suit the present study.

### **Children with hearing impairment**

Children with hearing impairment are those who have hearing loss of 60 dB or above in the better ear in the conversational range of frequencies and who attend inclusive schools or regular schools.

### **Inclusive schools**

Inclusive schools are those schools catering to children with hearing impairment along with normal children or typically developing children.

### **Checklist**

A checklist is a simple device adapted by the researcher. It consists of statements and two options -Yes/ -No to indicate the presence or absence of the relevant items mentioned.

### **Physical environment**

The physical school environment in the present study included the school building and all its contents like equipments, furniture, the site on which the school is located and the surrounding environment including various facilities and materials which are used by children, roadways and other hazards.

## CHAPTER II

### REVIEW OF LITERATURE

#### **Physical Environment and Inclusive schools – Related literature**

In a research study by vijetha (2005), to grade special schools a rating scale was developed, administered on teachers, parents and Principal of respective five special schools. The Rating scale was able to bring out the strengths and weaknesses of special schools in a more systematic manner and accordingly grades were assigned.

Speech perception of a child with hearing impairment is influenced by his/her physical environment (Houtgast, 1981; Nabelek & Mason, 1981).

School environment includes both physical environment and psychological environment. The physical environment of the school and classroom includes facilities, space, lighting, ventilation, desks and chairs, and air pollution, etc that provide safety and promote learning and student development (Cheng, 1994).

According to Ross (1978), for both normal hearing and individuals with hearing impairment has difficulty in understanding speech in the presence of noise.

During teaching learning process, many schools provide acoustically not a very comfortable environment that affects hearing aid users and speech intelligibility is affected by noise and reverberation (Maltby and knight, 2000).

School building must be given importance as it is created by the administrator, the teacher and architect (Birch and Johnstone, 1975).

The perception and consideration of the critical relationships between the buildings and its surroundings and the people who use it are affected by it and must be emphasized (Birch and Johnstone, 1975).

According to Lewin(1943), learning attitudes and behaviour and student's personal characteristics are affected by the classroom environment.

“The children of today are the adults of tomorrow. They deserve to inherit a safer and healthier world. There is no task more important than safeguarding their environment.” This message is emphasized by the Healthy Environments for Children Alliance (HECA), which focuses attention on the school environment as one of the key settings for promoting every child's environmental health. WHO (2003).

Different scales developed in assessing educational environments

Four environment indexes, based on Murray's Need-Press Model, were developed as reported in Pace & Stern, (1958)

- (a) The college characteristic Index
- (b) The high school characteristic Index
- (c) The Evening College Characteristic Index
- (d) The Organizational Climate Index.

Research evidence state inclusive education where children with disabilities interact with children without disabilities has been associated with increase in social and communication skills, IEP objectives have been achieved, parental expectations and attitudes are positive, social contacts (Fryxell & Kennedy, 1995) and improved behaviours (Lee & Odom, 1996).

According to Elkins, (1998), in mainstream classrooms, students with disabilities have the benefit of interacting and observing social and academic behaviour of students without disabilities.

To promote inclusive education teachers' attitudes are influenced by factors such as age of the child, type of child's disability, the severity of the disability, the level of the

support the teacher and the students receive from the school and local education authority, the other support services, their knowledge and skills about inclusion and in-service training courses received by the teachers (Sari, 2007).

Previous studies state teachers are in need of additional support resources for the inclusion of students with disabilities (Kuester, 2000).

In a research study by vijetha (2005), to grade special schools a rating scale was developed, administered on teachers, parents and Principal of respective five special schools. The Rating scale was able to bring out the strengths and weaknesses of special schools in a more systematic manner and accordingly grades were assigned.

A study by Rajesh and vijetha (2008) assessed the physical environment of special school. A checklist was prepared, administered on teachers and principal of respective four special schools. The "Physical environment - checklist" was able to bring out the strengths and weakness areas of school's physical environment and the order of improvement to be made was also suggested.

## CHAPTER III

### METHOD

For the present study 'Appraisal of the physical environment of inclusive schools for children with hearing Impairment in Mysore', the research design used is a 'Cross-sectional survey design'. The study included administering the checklist on teachers as well as parents of children with hearing impairment in respective Inclusive schools. The 'Physical environment- checklist' prepared by Rajesh & Vijetha (2008), was administered to collect the data.

#### **Sample**

Those schools specifically where children with hearing impairment studying along with typically developing children in and around Mysore were selected. There were 9 inclusive schools for children with hearing impairment in Mysore. To administer the checklist, each inclusive school was named as Inclusive school 1, Inclusive school 2, inclusive school 3, Inclusive school 4, Inclusive school 5, Inclusive school 6, Inclusive school 7, Inclusive school 8, and Inclusive school 9 respectively. All the teachers working in the school and particularly parents of children with hearing Impairment in nine inclusive schools were selected as 'respondents' as they are the most important members acquainted with the school. Perceptions of the teachers and parents about the physical environment would provide an appropriate base to understand the school environment. Hence their opinions were given a significant place.

#### **Tool**

To assess the physical environment in inclusive schools for children with hearing impairment an adapted version of the 'Physical environment ' checklist' prepared by Rajesh & Vijetha (2008), (Appendix-I) was used to collect data from participants. The checklist had two parts, first part had 11 questions intended to collect demographic information. The

second part included 60 statements for all the 7 areas- location, noise, building, instructional space, furniture & equipment, basic care & hygiene and facilities. According to the checklist, operational definitions of the areas are as follows

**Noise:** Noise is the unwanted and unpleasant sounds produced within the school or from outside of the school which disturbs the teaching-learning process very often. *(For example: Rail, Road, Aircraft, kitchen sounds etc.)*

**Location:** Location of the school is important because it has direct influence on teaching- Learning process. Location of a school has a crucial role in inclusive education especially for children with hearing impairment. The teachers, parents, outsiders, students everyone are influenced by it. *(For example: Bus facility, Auto facility etc.)*

**Building:** Even though Building of the inclusive school is hardly important. Its construction, sound absorption features definitely has a great impact in the learning process of children with hearing impairment. *(For example: The walls of the school building are thick & strong providing for sound absorption)*

**Instructional space:** Instructional space refers to classrooms. Classrooms in the school play a very important role. The appearance, the maintenance and the arrangement of the classrooms has a direct impact on teaching-learning process of children with hearing impairment. *(For example: for display of teaching learning materials like charts, models etc. to promote aesthetic sense.)*

**Basic care & hygiene:** The safety, the cleanliness and maintenance of all the regularly used places in the schools are important which has a direct impact on health of the children especially in schools where children spend most of their time. *(For example: Toilets thoroughly cleaned regularly)*

**Furniture & Equipment:** The furniture & equipment have a direct impact on teaching-learning process especially in inclusive schools for children with hearing



impairment. (For example: The school provide for 'Group hearing aids' working in good condition like F.M system, Induction loop system etc.)

**Facilities:** These facilitate the smooth functioning of all activities in the school. They promote enthusiasm in carrying out the activities and retain the interest (For example: Laboratory facilities, Library, Computer lab facility)

The checklist consisted of two options :-Yes or :-No to indicate the opinion of the respondents.

### **Procedure for data collection**

The researcher did the following

- 1) A covering letter (Appendix 6II) was given to the Principals of selected inclusive schools seeking permission to conduct the study and administer the checklist.
- 2) Prior appointment was taken to distribute the checklists to teachers. Parents were contacted informally. Only to those parents who were willing to participate were given the checklists.
- 3) Common instructions required and clarifications for filling up the checklist were given to the teachers and parents. The filled checklists were collected personally after 15 days by the researcher.
- 4) A total number of 84 checklists were given to the teachers and parents in 9 Inclusive schools. But only 72 completed checklists were received by the researcher.
- 5) The data collected thus was compiled in the score sheets and was further analyzed.

### **Procedure for scoring**

The checklist provided two options :-Yes or :-No. If the respondents mark :-Yes scoring would be :-1 (one) and if the respondent mark :-No scoring would :-0 (zero).

1. There were a total of 7 areas in the checklist, score for all areas put together is 60 and minimum score is 0
2. As the maximum score was different for all areas, the average score for each area of all the teachers and parents were to be calculated.
3. The Average percentage was to be calculated for each area of all teachers and parents.
4. Overall percentage of each Inclusive school was to be calculated separately.

### **Analysis of the data**

To compare among the Inclusive schools for children with hearing impairment in Mysore, an appropriate statistical analysis was used to see the significant differences in terms of areas like Location, Noise, Building, Instructional space etc.

## **CHAPTER IV**

### **RESULTS AND DISCUSSION**

The present study "Appraisal of physical environment of Inclusive schools for children with hearing impairment in Mysore" was aimed at assessing the physical environment of the Inclusive schools by administering the checklist on inclusive schools in Mysore. It was also aimed at giving the "order of importance" for improvement. A "Physical environment - Checklist" was used by the researcher. The checklist was administered in 9 Inclusive schools in Mysore. The analysis of the data collected, results and related discussion are presented in this chapter.

## Results

### Analysis of Inclusive School 1

Table 4.1. Average and Percentage Scores of 7 Teachers of Inclusive School 1

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	1	1	1	1	1	1	1	0.33	33.33
Noise	6	5	3	5	4	5	4	2	0.67	66.67
Building	6	2	2	2	2	2	2	3	0.36	35.71
Instructional space	8	1	1	1	1	1	1	1	0.13	12.50
Furniture & Equipment	8	1	1	1	1	1	1	2	0.14	14.29
Basic care & Hygiene	7	3	3	3	3	3	3	4	0.45	44.90
Facilities	22	9	7	9	10	9	10	9	0.41	40.91
Total	60	22	18	22	22	22	22	22	0.36	35.71

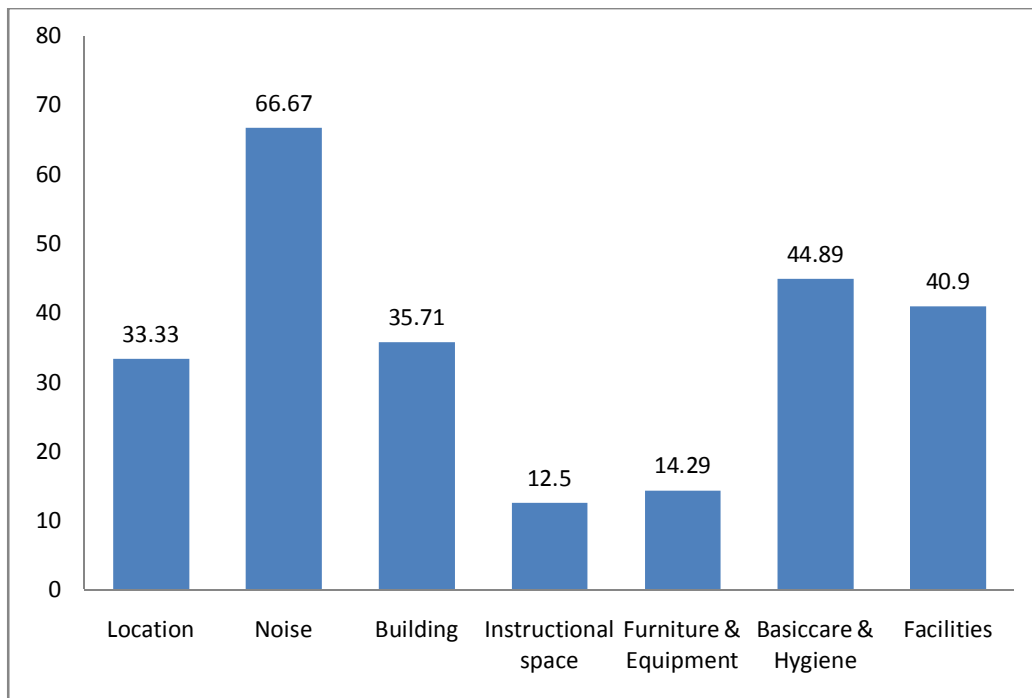


Figure 4.1. Average and Percentage Scores of 7 Teachers of Inclusive School 1

The above figure 4.1 clearly depicts that the area *Instructional Space* has been rated the lowest (12.5%) by the teachers of inclusive school 1. It can be observed that the teachers of this Inclusive school rated the Instructional space low when compared to other areas like Furniture & equipment, location and Building etc., of the inclusive school 1. However, they perceive the area of *Noise* has quite high (66.67%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. The lagging areas pointed out and to be worked upon from the perceptions of teachers for improvements of the physical environment in inclusive school 1 are as follows

- First, area *instructional space* has to improve.
- Second, area *Furniture & Equipment* needs concentration
- Third, area *Location* needs to be improved.
- Fourth, area *building* needs concentration
- Fifth, area *facilities* may be given importance.
- Sixth, area *basic care & hygiene* given importance.
- Seventh, the last are *Noise* may be given importance.

## Analysis of Inclusive School 1

Table 4.2. Average and Percentage Scores of Parents of Inclusive School 1

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	1	1	1					0.33	33.33
Noise	6	3	3	4					0.56	55.56
Building	6	5	4	2					0.61	61.11
Instructional space	8	7	3	1					0.46	45.83
Furniture & Equipment	8	5	3	1					0.38	37.50
Basic care & Hygiene	7	6	4	3					0.62	61.90
Facilities	22	17	7	9					0.50	50.00
<b>Total</b>	<b>60</b>	<b>44</b>	<b>25</b>	<b>21</b>					<b>0.50</b>	<b>50.00</b>

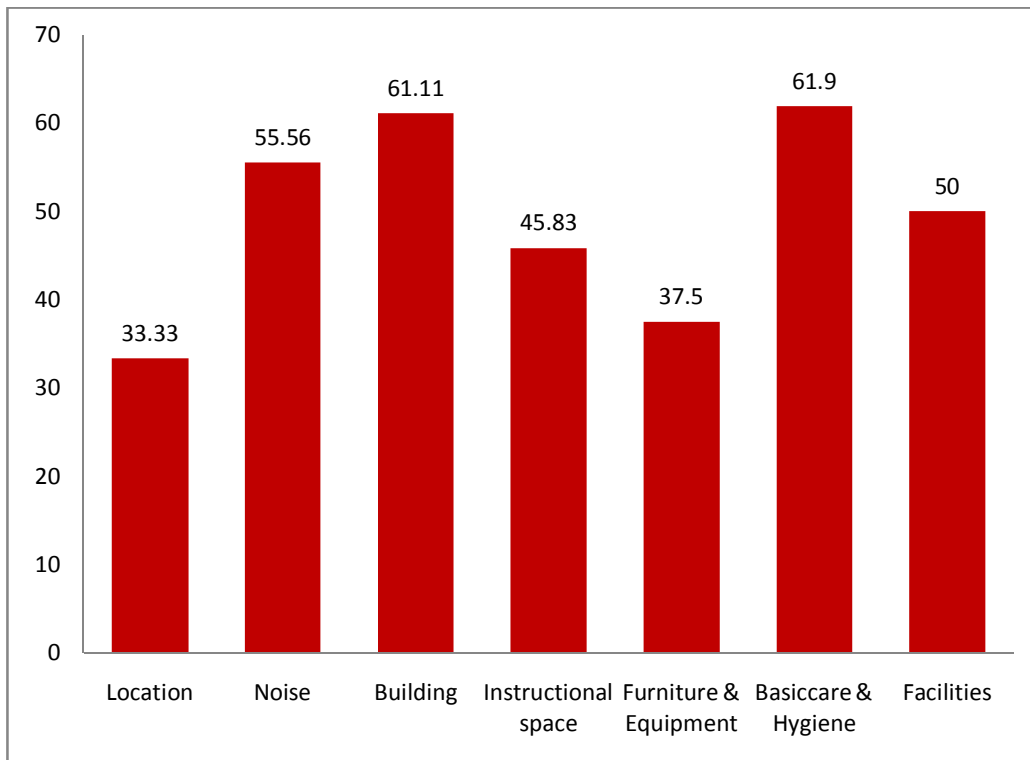


Figure 4.2. Average and Percentage Scores of Parents of Inclusive School 1

The above figure 4.2 clearly depicts that the area '*location*' has been rated the lowest (33.33%) by the parents of inclusive School 1. It can be observed that the parents of this Inclusive school rated the location low when compared to other areas like Furniture & equipment, location and Building etc., of the inclusive school. However, they perceive the area of '*building*' has quite high (61.11%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. The lagging areas pointed out and to be worked upon from the perceptions of parents for improvements of the physical environment in inclusive school 1 are as follows

- First, area '*location*' has to improve.
- Second, area '*furniture & equipment*' needs concentration
- Third, area '*instructional space*' needs to be improved.
- Fourth, area '*facilities*' needs concentration
- Fifth, area '*noise*' may be given importance.
- Sixth, area '*Building*' given importance.
- Seventh, the last is '*basic care & hygiene*' may be given importance.

## Analysis of Inclusive School 2

Table 4.3. Average and Percentage Scores of 7 Teachers of Inclusive School 2

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3	3	3	3	3	3	1.00	100.00
Noise	6	5	5	5	4	4	4	5	0.76	76.19
Building	6	6	6	5	6	6	6	6	0.98	97.62
Instructional space	8	7	8	7	7	7	7	7	0.89	89.29
Furniture & Equipment	8	5	6	6	6	7	8	6	0.79	78.57
Basic care & Hygiene	7	7	7	7	7	7	7	7	1.00	100.00
Facilities	22	17	16	17	18	18	18	16	0.78	77.92
Total	60	50	51	50	51	52	53	50	0.85	85.00

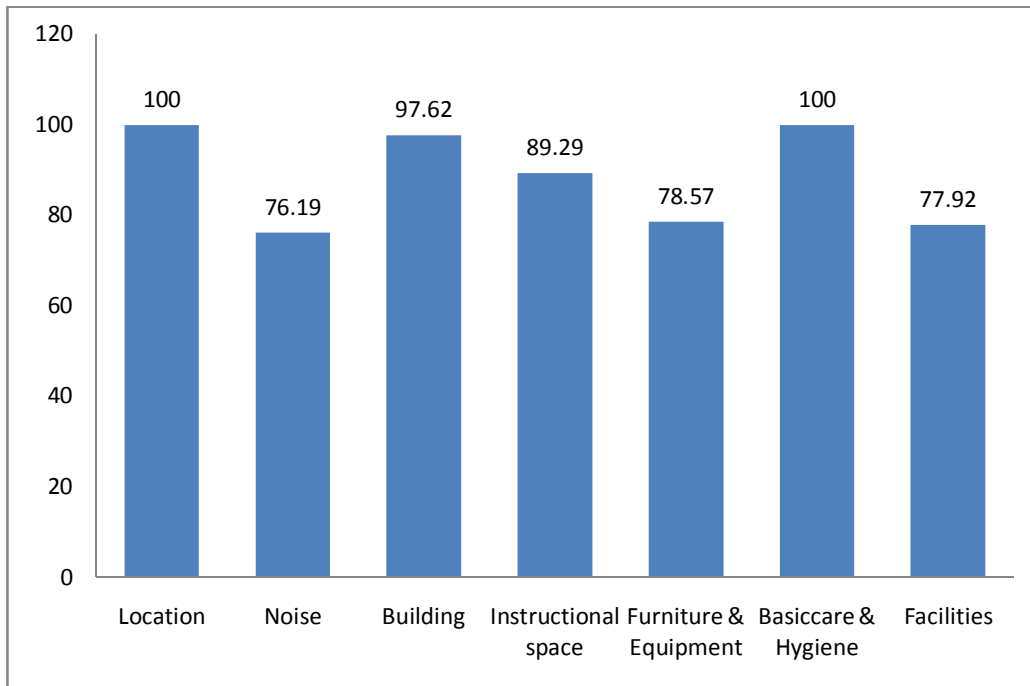


Figure 4.3. Average and Percentage Scores of 7 Teachers of Inclusive School 2



The above figure 4.3 clearly depicts that the area '*noise*' has been rated the lowest (76.19%) by the teachers of Inclusive School 2. However, they perceive the area of '*location*' and '*basic care hygiene*' has quite high (100%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. The lagging areas pointed out and to be worked upon from the perceptions of teachers for improvements of the physical environment in inclusive school 2 are as follows

- First, area '*noise*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*furniture & equipment*' needs to be improved.
- Fourth, area '*instructional space*' needs concentration
- Fifth, area '*building*' may be given importance.
- Sixth, area '*basic care & hygiene*' and '*location*' may be maintained.

## Analysis of Inclusive School 2

Table 4.4. Average and Percentage Scores of Parents of Inclusive School 2

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3	2	3				0.92	91.67
Noise	6	3	3	0	5				0.46	45.83
Building	6	2	5	4	6				0.71	70.83
Instructional space	8	7	7	7	7				0.88	87.50
Furniture & Equipment	8	4	7	5	5				0.66	65.63
Basic care & Hygiene	7	6	7	4	7				0.86	85.71
Facilities	22	15	15	10	10				0.57	56.82
<b>Total</b>	<b>60</b>	<b>40</b>	<b>47</b>	<b>32</b>	<b>43</b>				<b>0.68</b>	<b>67.50</b>

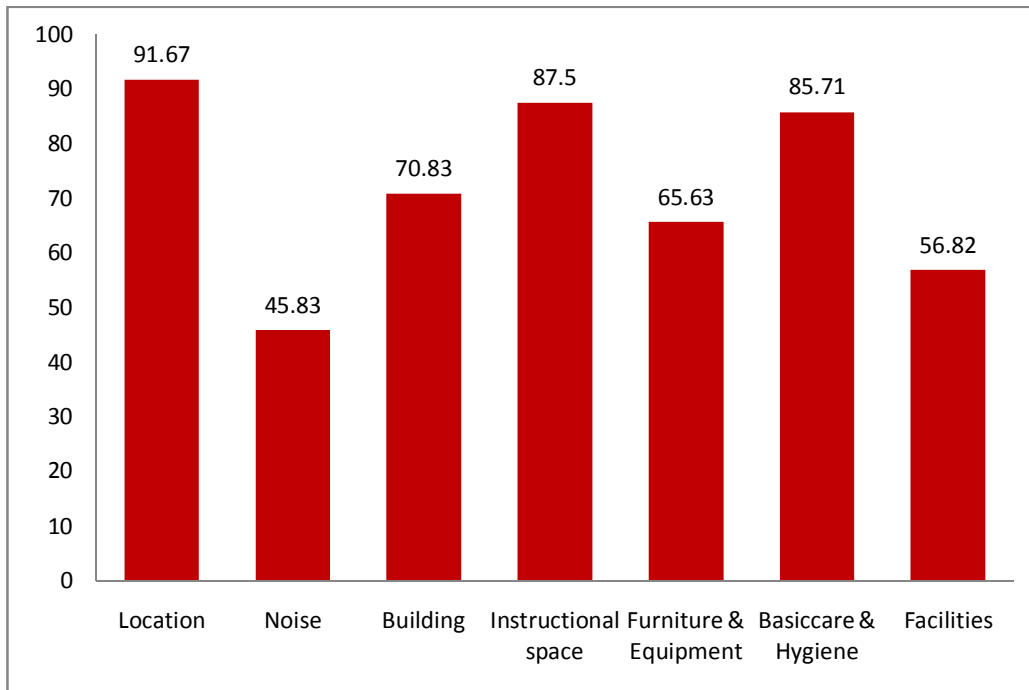


Figure 4.4. Average and Percentage Scores of Parents of Inclusive School 2

The above figure 4.4 clearly depicts that the area '*noise*' has been rated the lowest (45.83%) by the parents of Inclusive School 2. The area of '*location*' is rated high (91.67%).

Improvements of the physical environment in inclusive school 2 are as follows

- First, area '*noise*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*furniture & equipment*' needs to be improved.
- Fourth, area '*building*' needs concentration
- Fifth, area '*basic care & hygiene*' may be given importance.
- Sixth, area '*instructional space*' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 3

Table 4.5. Average and Percentage Scores of 6 Teachers of Inclusive School 3

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	3	3	2	3	2		0.83	83.33
Noise	6	3	4	3	3	3	3		0.53	52.78
Building	6	5	5	5	5	5	4		0.81	80.56
Instructional space	8	5	6	5	5	5	5		0.65	64.58
Furniture & Equipment	8	2	4	3	3	3	2		0.35	35.42
Basic care & Hygiene	7	5	6	5	5	5	5		0.74	73.81
Facilities	22	11	15	11	11	11	11		0.53	53.03
Total	60	33	43	35	34	35	32		0.59	58.89

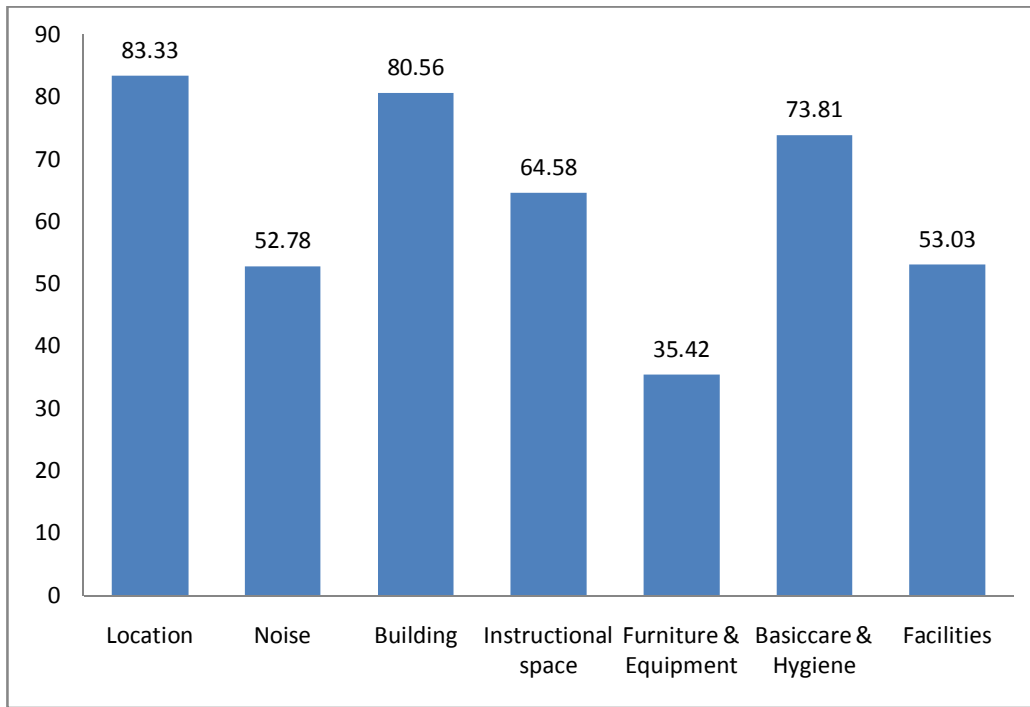


Figure 4.5. Average and Percentage Scores of 6 Teachers of Inclusive School 3

The above figure 4.5 clearly depicts that the area '*furniture & equipment*' has been rated the lowest (35.41%) by the teachers of Inclusive School 3. They perceive the area of '*location*' has quite high (83.33%). The order of improvements of the physical environment in inclusive school 3 to be made is as follows.

- First, area '*furniture & equipment*' has to improve.
- Second, area '*noise*' needs concentration
- Third, area '*facilities*' needs to be improved.
- Fourth, area '*instructional space*' needs concentration
- Fifth, area '*basic care & hygiene*' may be given importance.
- Sixth, area '*building*' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 3

Table 4.6 .Average and Percentage Scores of Parents of Inclusive School4

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	2	2					0.67	66.67
Noise	6	3	3	4					0.56	55.56
Building	6	4	4	6					0.78	77.78
Instructional space	8	5	7	8					0.83	83.33
Furniture & Equipment	8	4	4	4					0.50	50.00
Basic care & Hygiene	7	4	6	7					0.81	80.95
Facilities	22	14	15	14					0.65	65.15
Total	60	36	41	45					0.68	67.78

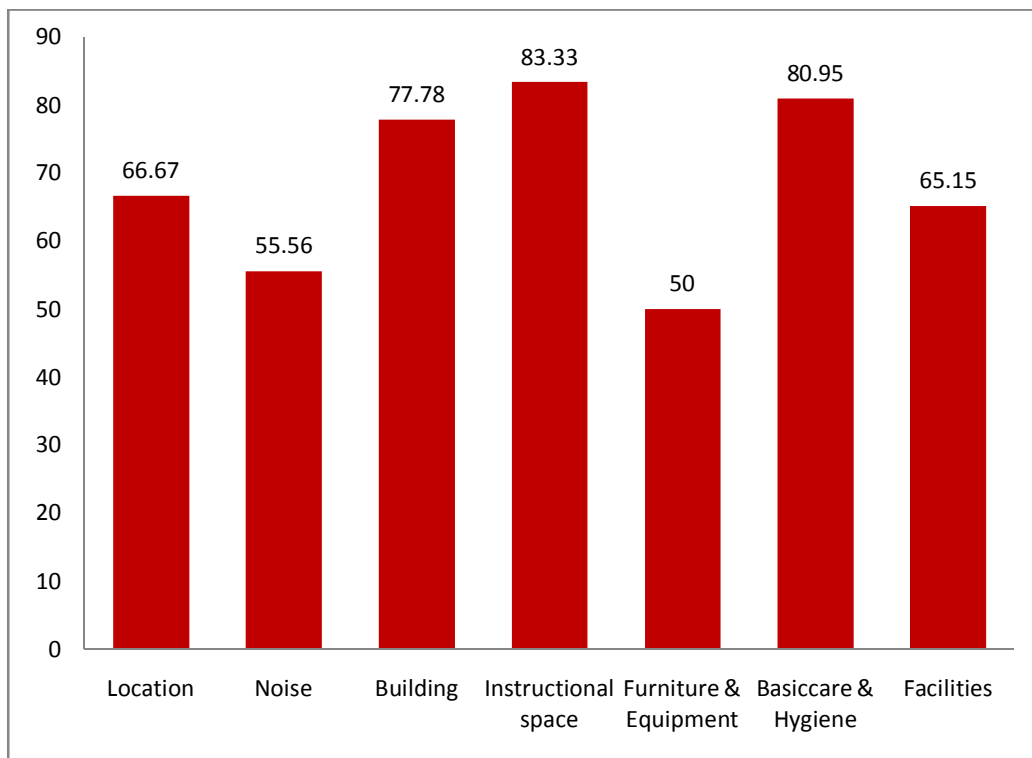


Figure 4.6. Average and Percentage Scores of Parents of Inclusive School 4

The above figure 4.6 clearly depicts that the area '*furniture & equipment*' has been rated the lowest (50%) by the parents of Inclusive School 3. They perceive the area of '*instructional space*' has quite high (83.33%). From the perceptions of parents for improvements of the physical environment in inclusive school 3 are as follows

- First, area '*furniture & equipment*' has to improve.
- Second, area '*noise*' needs concentration
- Third, area '*facilities*' needs to be improved.
- Fourth, area '*location*' needs concentration
- Fifth, area '*building*' may be given importance.
- Sixth, area '*basic care & hygiene*' given importance.
- Seventh, the last are '*instructional space*' may be given importance.

### Analysis of Inclusive School 4

Table 4.7. Average and Percentage Scores of 5 Teachers of Inclusive School 4

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3	3	3	3			1.00	100.00
Noise	6	5	4	4	3	5			0.70	70.00
Building	6	4	6	3	3	5			0.70	70.00
Instructional space	8	8	7	8	8	8			0.98	97.50
Furniture & Equipment	8	8	8	5	6	8			0.88	87.50
Basic care & Hygiene	7	7	7	5	6	7			0.91	91.43
Facilities	22	22	17	20	21	17			0.88	88.18
<b>Total</b>	<b>60</b>	<b>57</b>	<b>52</b>	<b>48</b>	<b>50</b>	<b>53</b>			<b>0.87</b>	<b>86.67</b>

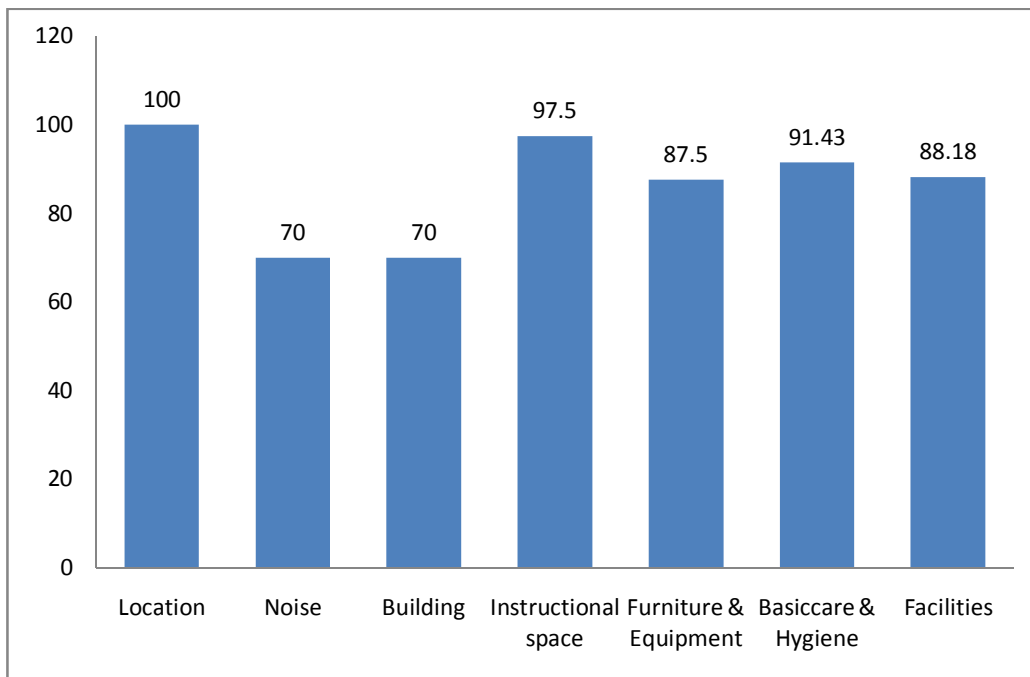


Figure 4.7. Average and Percentage Scores of 5 Teachers of Inclusive School



The above figure 4.7 clearly depicts that the area '*noise & building*' has been rated the lowest (70%) by the teachers of Inclusive School 4. '*Location*' has been rated high (100%). The lagging areas pointed out and to be worked upon from the perceptions of teachers for improvements of the physical environment in inclusive school 4 are as follows

- First, area '*noise & building*' has to improve.
- Second, area '*furniture & equipment*' needs concentration
- Third, area '*facilitates*' needs to be improved.
- Fourth, area '*basic care & hygiene*' needs concentration
- Fifth, area '*instructional space*' may be given importance.
- Sixth, area '*location*' given importance.

### Analysis of Inclusive School 4

Table 4.8. Average and Percentage Scores of Parents of Inclusive School4

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	2						0.83	83.33
Noise	6	5	5						0.83	83.33
Building	6	5	3						0.67	66.67
Instructional space	8	8	7						0.94	93.75
Furniture & Equipment	8	8	7						0.94	93.75
Basic care & Hygiene	7	7	6						0.93	92.86
Facilities	22	21	22						0.98	97.73
<b>Total</b>	<b>60</b>	<b>57</b>	<b>52</b>						<b>0.91</b>	<b>90.83</b>

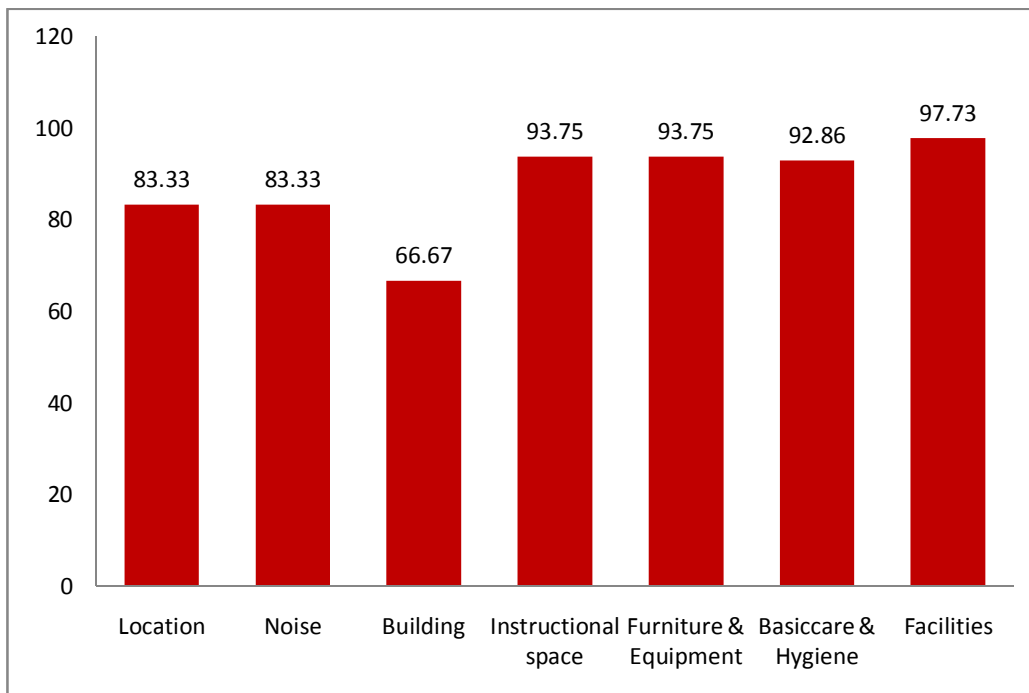


Figure 4.8. Average and Percentage Scores of Parents of Inclusive School 4

The above figure 4.8 clearly depicts that the area '*building*' has been rated the lowest (66.66%) by the parents of Inclusive School 4. They perceive the area of '*facilities*' has quite high (97.73%). From the perceptions of parents for improvements of the physical environment in inclusive school 4 are as follows

- First, area '*building*' has to improve.
- Second, area '*noise*' needs concentration
- Third, area '*location*' needs to be improved.
- Fourth, area '*basic care & hygiene*' needs concentration
- Fifth, area '*furniture & equipment*' may be given importance.
- Sixth, area '*instructional space*' given importance.
- Seventh, the last are '*facilities*' may be given importance.

### Analysis of Inclusive School 5

Table 4.9. Average and Percentage Scores of 5 Teachers of Inclusive School 5

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3	3	3	3			1.00	100.00
Noise	6	4	4	4	6	4			0.73	73.33
Building	6	4	3	3	4	3			0.57	56.67
Instructional space	8	6	7	7	4	7			0.78	77.50
Furniture & Equipment	8	3	3	3	4	3			0.40	40.00
Basic care & Hygiene	7	6	6	6	5	6			0.83	82.86
Facilities	22	13	12	13	12	12			0.56	56.36
<b>Total</b>	<b>60</b>	<b>39</b>	<b>38</b>	<b>39</b>	<b>38</b>	<b>38</b>			<b>0.64</b>	<b>64.00</b>

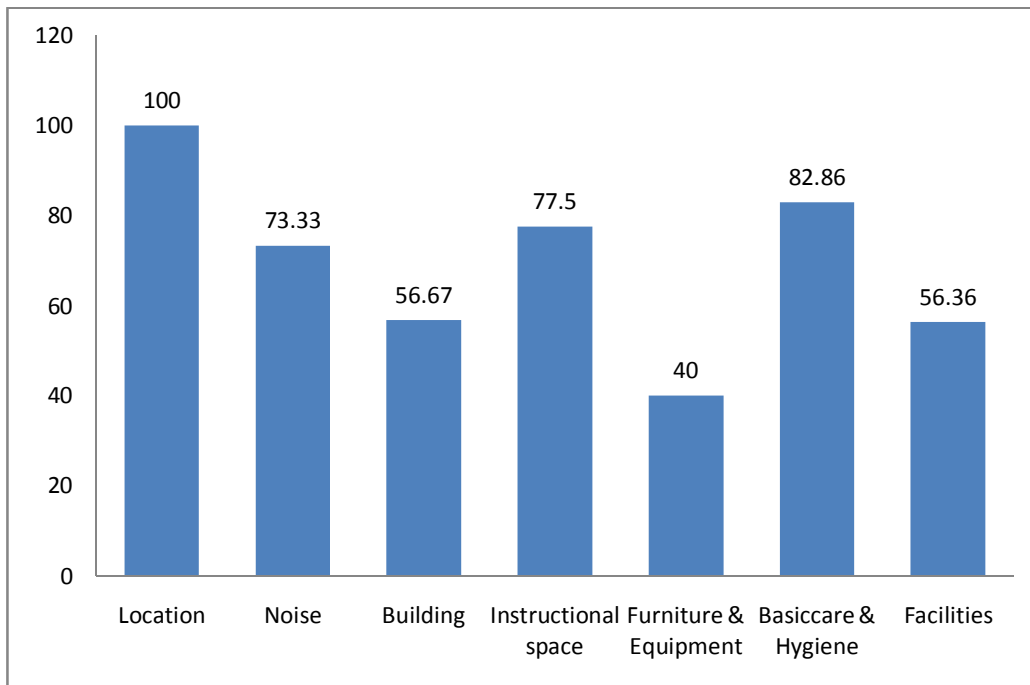


Figure 4.9. Average and Percentage Scores of 5 Teachers of Inclusive School 5

The above figure 4.9 clearly depicts that the area '*furniture & equipment*' has been rated the lowest (33.33%) by the teachers of Inclusive School 5. They perceive the area of '*location*' has highest (100%). Improvements of the physical environment in inclusive school 5 are as follows

- First, area '*furniture & equipment*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*building*' needs to be improved.
- Fourth, area '*instructional space*' needs concentration
- Fifth, area '*noise*' may be given importance.
- Sixth, area '*basic care & hygiene*' given importance.
- Seventh, the last '*location*' may be maintained.

### Analysis of Inclusive School 5

Table 4.10. Average and Percentage Scores of Parents of Inclusive School 5

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3						1.00	100.00
Noise	6	4	4						0.67	66.67
Building	6	3	2						0.42	41.67
Instructional space	8	7	7						0.88	87.50
Furniture & Equipment	8	4	4						0.50	50.00
Basic care & Hygiene	7	5	5						0.71	71.43
Facilities	22	17	16						0.75	75.00
<b>Total</b>	<b>60</b>	<b>43</b>	<b>41</b>						<b>0.70</b>	<b>70.00</b>

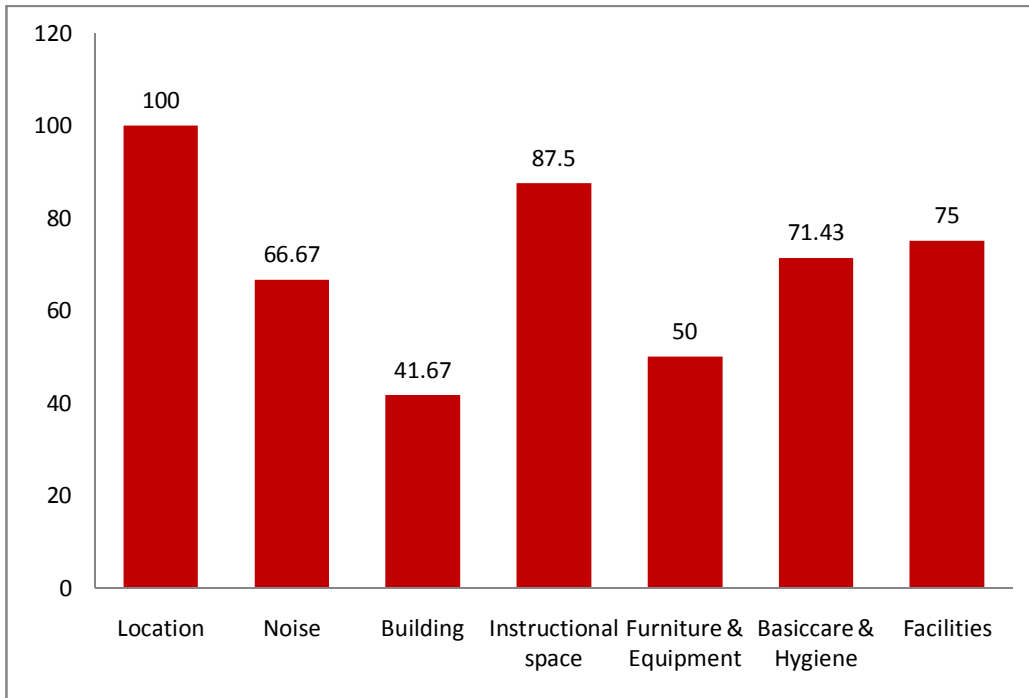


Figure 4.10. Average and Percentage Scores of Parents of Inclusive School 5

The above figure 4.10 clearly depicts that the area '*building*' has been rated the lowest (70%) by the parents of Inclusive School 5. However, they perceive the area of '*location*' has quite high (100%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. The lagging areas pointed out and to be worked upon from the perceptions of parents for improvements of the physical environment in inclusive school 5 are as follows

- First, area '*building*' has to improve.
- Second, area '*furniture & equipment*' needs concentration
- Third, area '*noise*' needs to be improved.
- Fourth, area '*basic care & hygiene*' needs concentration
- Fifth, area '*facilities*' may be given importance.
- Sixth, area '*instructional space*' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 6

Table 4.11. Average and Percentage Scores of 4 Teachers of Inclusive School 6

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	2	2	2				0.67	66.67
Noise	6	5	3	5	5				0.75	75.00
Building	6	4	4	4	4				0.67	66.67
Instructional space	8	8	2	8	8				0.81	81.25
Furniture & Equipment	8	7	2	8	8				0.78	78.13
Basic care & Hygiene	7	6	0	7	7				0.71	71.43
Facilities	22	13	4	12	12				0.47	46.59
<b>Total</b>	<b>60</b>	<b>45</b>	<b>17</b>	<b>46</b>	<b>46</b>				<b>0.64</b>	<b>64.17</b>

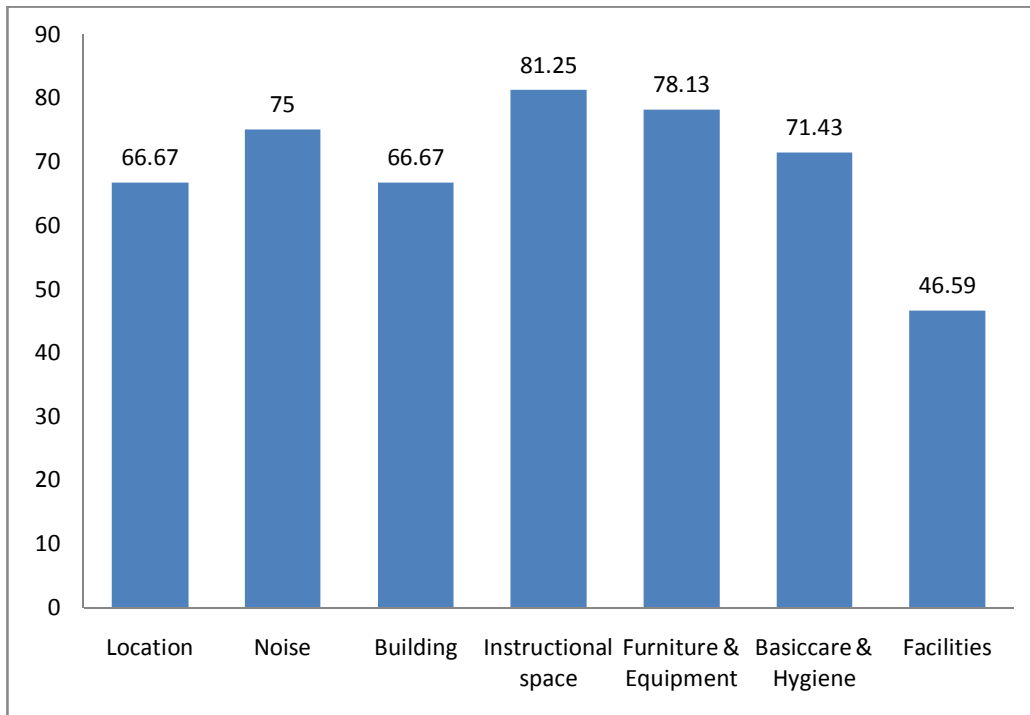


Figure 4.11. Average and Percentage Scores of 4 Teachers of Inclusive School 6



The above figure 4.11 clearly depicts that the area '*facilities*' has been rated the lowest (46.59%) by the teachers of Inclusive School 6. The area of '*instructional space*' is rated high (81.25%). For improvements of the physical environment in inclusive school 6 are as follows

- First, area '*facilities*' has to improve.
- Second, area '*building*' needs concentration
- Third, area '*location*' needs to be improved.
- Fourth, area '*basic care & hygiene*' needs concentration
- Fifth, area '*noise*' may be given importance.
- Sixth, area '*furniture & equipment*' given importance.
- Seventh, the last are '*instructional space*' may be given importance.

### Analysis of Inclusive School 6

Table 4.12. Average and Percentage Scores of Parents of Inclusive School6

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	1						0.50	50.00
Noise	6	5	4						0.75	75.00
Building	6	4	4						0.67	66.67
Instructional space	8	7	8						0.94	93.75
Furniture & Equipment	8	7	7						0.88	87.50
Basic care & Hygiene	7	6	6						0.86	85.71
Facilities	22	13	16						0.66	65.91
<b>Total</b>	<b>60</b>	<b>44</b>	<b>46</b>						<b>0.75</b>	<b>75.00</b>

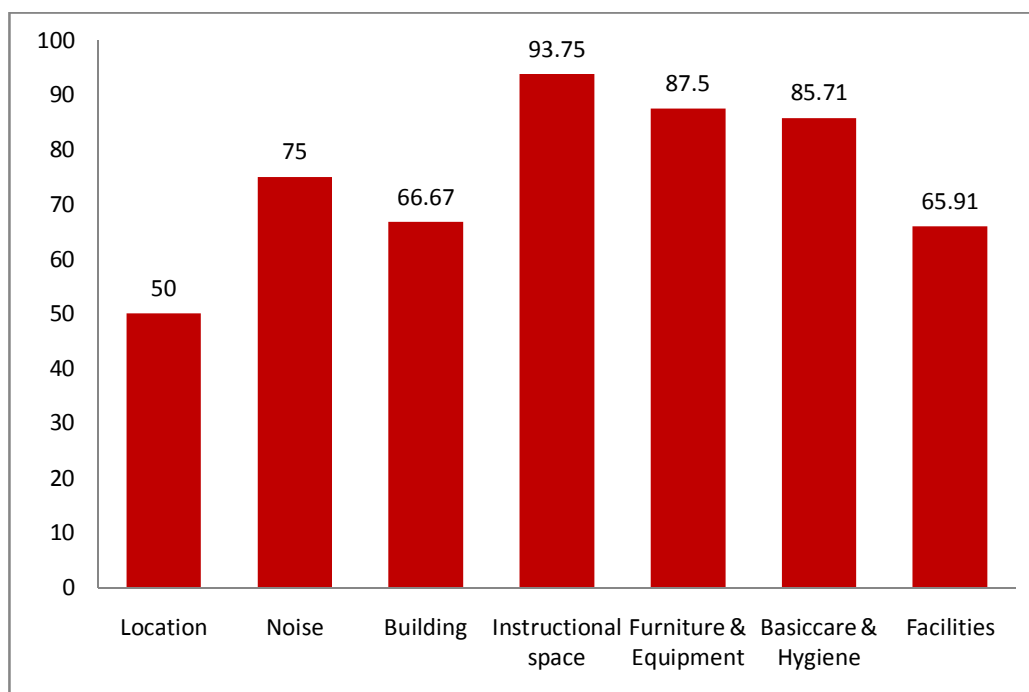


Figure 4.12. Average and Percentage Scores of Parents of Inclusive School 6

The above figure 4.12 clearly depicts that the area '*location*' has been rated the lowest (50%) by the parents of Inclusive School 6. The area of '*instructional space*' is rated high (93.75%). Improvements of the physical environment in inclusive school 6 are as follows

- First, area '*location*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*building*' needs to be improved.
- Fourth, area '*noise*' needs concentration
- Fifth, area '*basic care & hygiene*' may be given importance.
- Sixth, area '*furniture & equipment*' given importance.
- Seventh, the last are '*instructional space*' may be given importance.

### Analysis of Inclusive School 7

Table 4.13. Average and Percentage Scores of 5 Teachers of Inclusive School 7

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	3	2	3	3			0.87	86.67
Noise	6	1	3	2	5	3			0.47	46.67
Building	6	4	6	4	6	5			0.83	83.33
Instructional space	8	6	7	6	5	7			0.78	77.50
Furniture & Equipment	8	3	5	4	3	7			0.55	55.00
Basic care & Hygiene	7	5	5	6	6	6			0.80	80.00
Facilities	22	12	10	11	10	18			0.55	55.45
<b>Total</b>	<b>60</b>	<b>33</b>	<b>39</b>	<b>35</b>	<b>38</b>	<b>49</b>			<b>0.65</b>	<b>64.67</b>

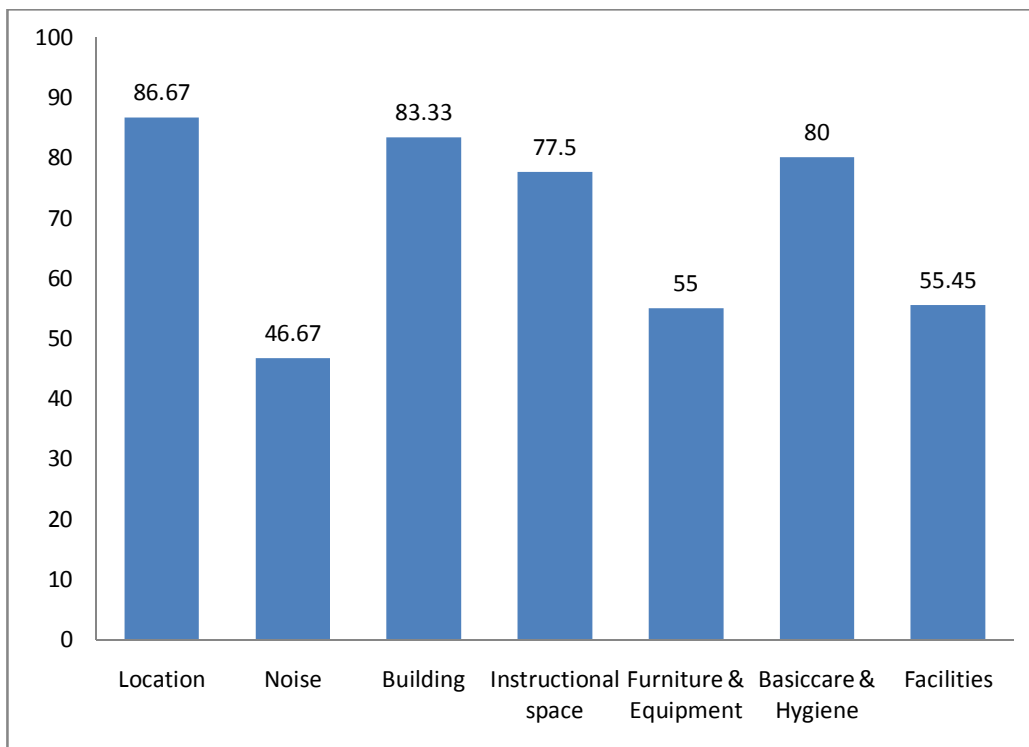


Figure 4.13. Average and Percentage Scores of 5 Teachers of Inclusive School 7

The above figure 4.13 clearly depicts that the area '*noise*' has been rated the lowest(46.67%) by the teachers of Inclusive School 7. The area of '*location*' is rated high (86.67%). Improvements of the physical environment in inclusive school 7 are as follows

- First, area '*noise*' has to improve.
- Second, area '*furniture & equipment*' needs concentration
- Third, area '*facilities*' needs to be improved.
- Fourth, area '*instructional space*' needs concentration
- Fifth, area '*basic care & hygiene*' may be given importance.
- Sixth, area '*building*' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 7

Table 4.14. Average and Percentage Scores of Parents of Inclusive School7

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	2						0.67	66.67
Noise	6	3	2						0.42	41.67
Building	6	3	3						0.50	50.00
Instructional space	8	4	4						0.50	50.00
Furniture & Equipment	8	2	2						0.25	25.00
Basic care & Hygiene	7	0	0						0.00	0.00
Facilities	22	5	6						0.25	25.00
<b>Total</b>	<b>60</b>	<b>19</b>	<b>19</b>						<b>0.32</b>	<b>31.67</b>

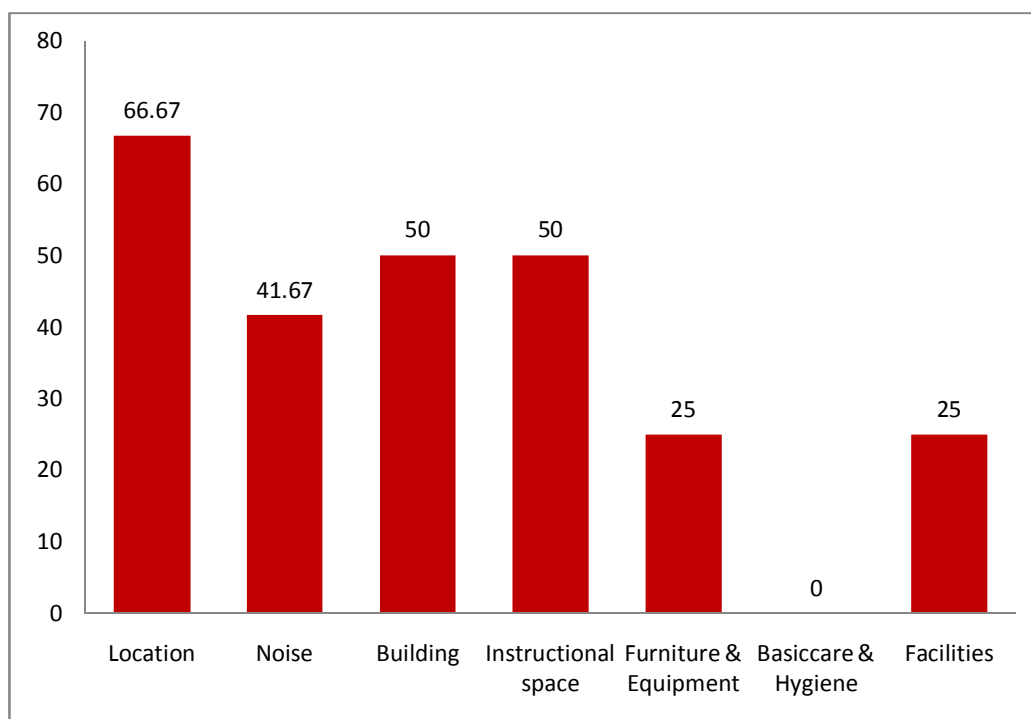


Figure 4.14. Average and Percentage Scores of Parents of Inclusive School 7

The above figure 4.14 clearly depicts that the area '*basic care & hygiene*' has been rated the lowest (0%) by the parents of Inclusive School 7. They perceive the area of '*location*' has quite high (66.67%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. Improvements of the physical environment in inclusive school 7 are as follows

- First, area '*basic care & hygiene*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*furniture & equipment*' needs to be improved.
- Fourth, area 'noise' needs concentration
- Fifth, area '*building*' may be given importance.
- Sixth, area 'instructional space' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 8

Table 4.15. Average and Percentage Scores of 7 Teachers of Inclusive School 8

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3	3	2	2	2	2	2	0.76	76.19
Noise	6	2	4	2	3	3	2	3	0.45	45.24
Building	6	3	5	4	4	3	3	5	0.64	64.29
Instructional space	8	5	7	4	3	6	6	4	0.63	62.50
Furniture & Equipment	8	4	4	3	3	4	4	4	0.46	46.43
Basic care & Hygiene	7	6	7	6	2	5	6	5	0.76	75.51
Facilities	22	12	16	9	5	10	11	7	0.45	45.45
<b>Total</b>	<b>60</b>	<b>35</b>	<b>46</b>	<b>30</b>	<b>22</b>	<b>33</b>	<b>34</b>	<b>30</b>	<b>0.55</b>	<b>54.76</b>

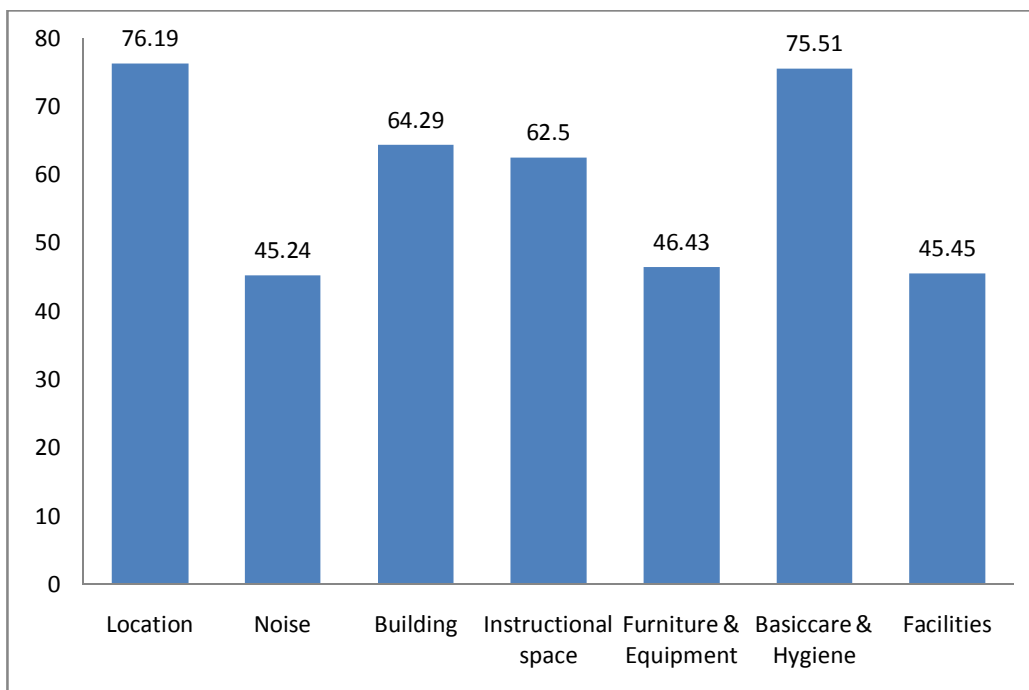


Figure 4.15. Average and Percentage Scores of 7 Teachers of Inclusive School 8



The above figure 4.15 clearly depicts that the area '*noise*' has been rated the lowest (45.24%) by the teachers of Inclusive School 8. They perceive the area of '*location*' has quite high (76.19%). From the above rating it can be clearly said that all the areas mentioned herein needs improvement, if the school's physical environment has to be effective. The lagging areas pointed out and to be worked upon from the perceptions of teachers for improvements of the physical environment in inclusive school 8 are as follows

- First, area '*noise*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*furniture & equipment*' needs to be improved.
- Fourth, area 'instructional space' needs concentration
- Fifth, area '*building*' may be given importance.
- Sixth, area 'basic care & hygiene' given importance.
- Seventh, the last are '*location*' may be given importance.

### Analysis of Inclusive School 8

Table 4.16. Average and Percentage Scores of Parents of Inclusive School 8

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	3							1.00	100.00
Noise	6	4							0.67	66.67
Building	6	6							1.00	100.00
Instructional space	8	6							0.75	75.00
Furniture & Equipment	8	4							0.50	50.00
Basic care & Hygiene	7	6							0.86	85.71
Facilities	22	11							0.50	50.00
<b>Total</b>	<b>60</b>	<b>40</b>							<b>0.67</b>	<b>66.67</b>

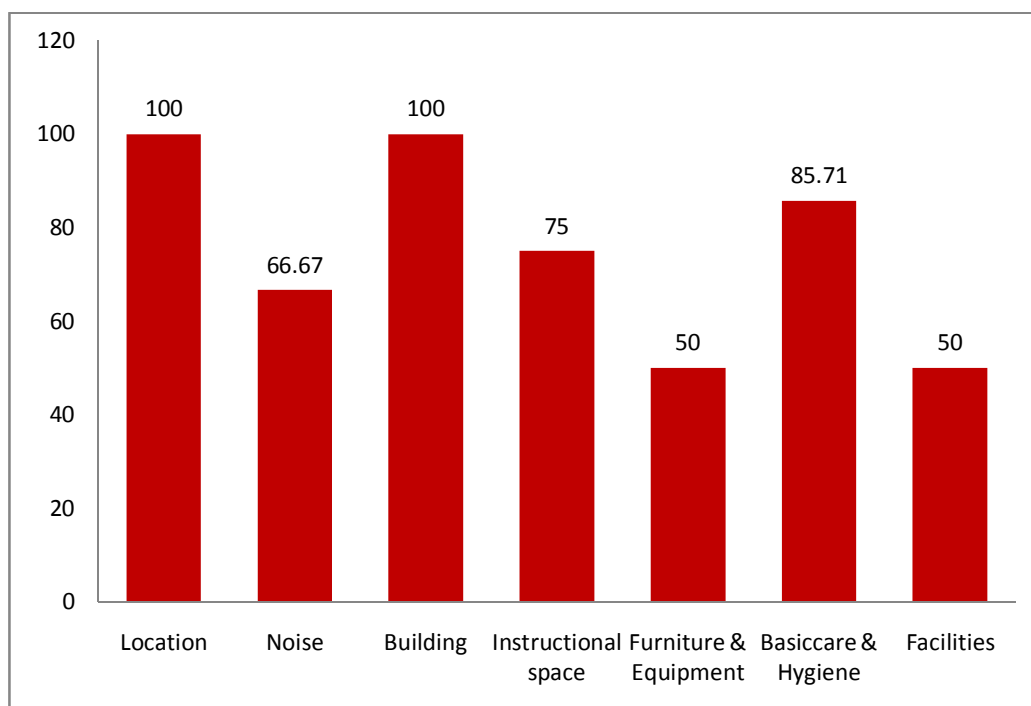


Figure 4.16. Average and Percentage Scores of Parents of Inclusive School 8

The above figure 4.16 clearly depicts that the area '*facilities*' has been rated the lowest (46.66%) by the parents of Inclusive School 8. However, they perceive the area of '*location*' and '*building*' has quite high (100%). Improvements of the physical environment in inclusive school 1 are as follows

- First, area '*facilities*' has to improve.
- Second, area '*furniture & equipment*' needs concentration
- Third, area '*noise*' needs to be improved.
- Fourth, area 'instructional space' needs concentration
- Fifth, area '*basic care & hygiene*' may be given importance.
- Sixth, area '*building*' and '*location*' may be maintained.

### Analysis of Inclusive School 9

Table 4.17. Average and Percentage Scores of 5 Teachers of Inclusive School 9

Areas and Total statements	Total Questions	Teachers							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	2	1	2	2			0.60	60.00
Noise	6	2	3	2	6	1			0.47	46.67
Building	6	4	3	5	6	4			0.73	73.33
Instructional space	8	5	4	6	7	4			0.65	65.00
Furniture & Equipment	8	3	3	4	4	3			0.43	42.50
Basic care & Hygiene	7	4	4	3	5	3			0.54	54.29
Facilities	22	15	13	12	18	15			0.66	66.36
<b>Total</b>	<b>60</b>	<b>35</b>	<b>32</b>	<b>33</b>	<b>48</b>	<b>32</b>			<b>0.60</b>	<b>60.00</b>

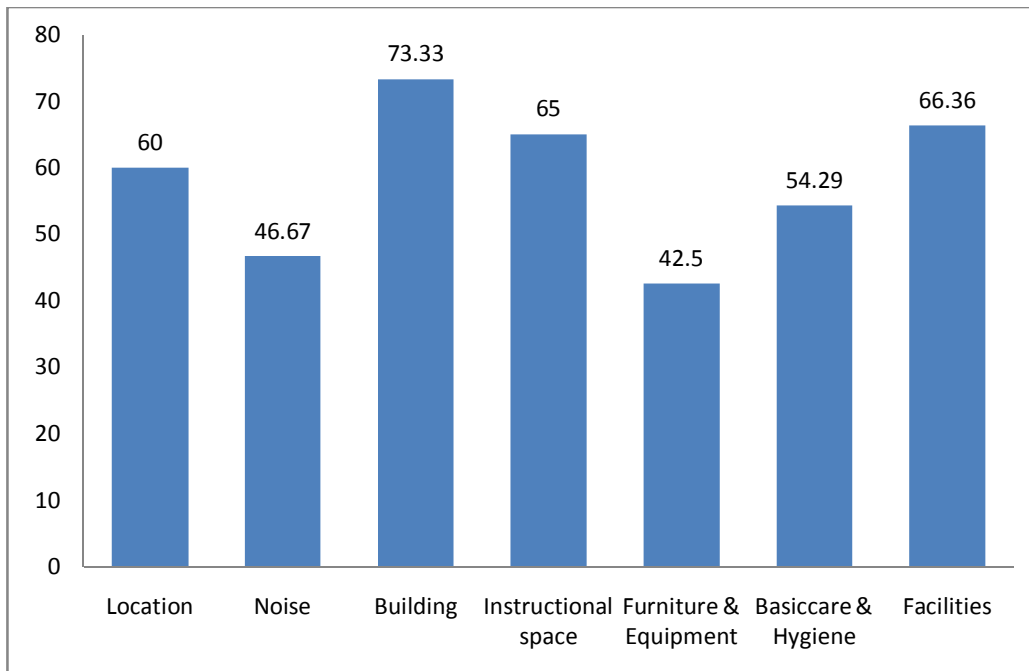


Figure 4.17. Average and Percentage Scores of 5 Teachers of Inclusive School 9

The above figure 4.17 clearly depicts that the area '*furniture & equipment*' has been rated the lowest (42.5%) by the teachers of Inclusive School 8. However, they perceive the area of '*building*' has quite high (73.33%). For improvements of the physical environment in inclusive school 9 are as follows

- First, area '*furniture & equipment*' has to improve.
- Second, area '*noise*' needs concentration
- Third, area '*basic care & hygiene*' needs to be improved.
- Fourth, area '*location*' space needs concentration
- Fifth, area '*instructional space*' may be given importance.
- Sixth, area '*facilities*' given importance.
- Seventh, the last area '*building*' may be given importance.

### Analysis of Inclusive School 9

Table 4.18. Average and Percentage Scores of Parents of Inclusive School 9

Areas and Total statements	Total Questions	Parents							Average	Average Percentage
		1	2	3	4	5	6	7		
Location	3	2	3						0.83	83.33
Noise	6	2	5						0.58	58.33
Building	6	3	6						0.75	75.00
Instructional space	8	4	6						0.63	62.50
Furniture & Equipment	8	2	4						0.38	37.50
Basic care & Hygiene	7	0	6						0.43	42.86
Facilities	22	6	11						0.39	38.64
Total	60	19	41						0.50	50.00

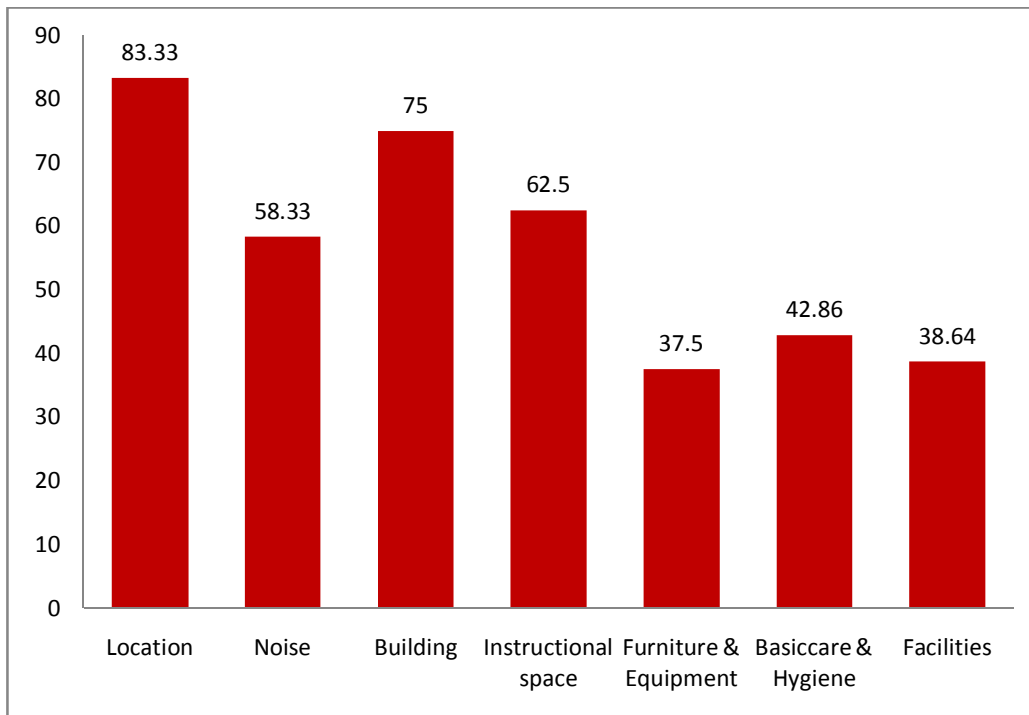


Figure 4.18 .Average and Percentage Scores of Parents of Inclusive School 9

The above figure 4.18 clearly depicts that the area '*furniture & equipment*' has been rated the lowest (37.5%) by the parents of Inclusive School 9. It can be observed that the parents of this Inclusive school rated the furniture & equipment low when compared to other areas like Furniture & equipment, location and Building etc., of the inclusive school. However, they perceive the area of '*location*' has quite high (83.33%).

- First, area '*furniture & equipment*' has to improve.
- Second, area '*facilities*' needs concentration
- Third, area '*basic care & hygiene*' needs to be improved.
- Fourth, area '*noise*' needs concentration
- Fifth, area '*instructional space*' may be given importance.
- Sixth, area '*building*' given importance.
- Seventh, the last are '*location*' may be given importance.

## Discussion

According to the literature reviewed the present study concentrated on 7 important areas of physical environment. 'Physical environment checklist' was used as it was felt by the researcher that the checklist was able to measure the 7 important areas of physical environment. Physical environment includes many areas, but the most important area for a school and particularly for children with hearing impairment have been highlighted in the checklist. Keeping in view, the time frame also the checklist was chosen.

All the 7 areas are important. School environment includes both physical environment and psychological environment. The physical environment of the school and classroom includes facilities, space, lighting, ventilation, desks and chairs, and air pollution, etc that provide safety and promote learning and student development (Cheng, 1994).

The results state the opinions of teachers and parents regarding different areas and the areas which were rated high and low in each particular inclusive school. Extending the discussion further, it is interesting to know the combined opinion of both the teachers and parents regarding the areas for each inclusive school.

In inclusive school no 1, it is observed that the area 'furniture & equipment' has been given second place to be improved by both teachers and parents. And as per teachers' opinion, 'instructional space' needs the most attention and according to parents 'location' needs more importance. If observed closely, location and instructional space are relatively connected. If location was comfortable then definitely instructional space would have been comfortable. Therefore, inclusive school no.1 may give first priority to 'location' which would automatically improve the instructional space and second priority to be worked upon would be 'furniture & equipment'

In inclusive school 2, both teachers and parents have rated 'location' as the last area to be improved compared to other areas. It means, they both are comfortable with



the location. And the interesting finding about this school is in almost all the areas, the opinions of teachers and parents are similar, hence the order of importance to be given to improve the areas for this school is appropriate and may be worked upon in the same order. And the opinion of both teachers and parents with regard to the area Noise needs the first priority to be improved.

In inclusive school no.3, it is observed that both the teacher and parents' perception about 3 different areas are same such as first furniture and equipment, second noise and third facilities have to be improved. It clearly depicts to a great extent that the weaknesses in this school is well understood by the teachers and parents. As their perceptions are same, the results may be considered true and may be worked upon.

In Inclusive school 4, it is observed that the opinion of teachers and parents are same for the 3 areas. The areas noise and building needs special attention and to be worked upon immediately. The perception and consideration of the critical relationships between the buildings and its surroundings and the people who use it are affected by it must be emphasized (Birch and Johnstone, 1975). If we analyze according to the order of importance, for both teachers and parents, instructional space is in the fifth place.

In inclusive school 5, both teacher and parents have rated location to be highest area compared to other areas, the teachers and parents seem to have varied opinions for different areas. Hence before making any improvements, few more measures may be adapted to get the appropriate order of importance.

In inclusive school 6, it is observed that the opinion of both teachers and parents are same for the areas Instructional space and furniture & equipment, according to the order of importance to be improved, they gave them sixth place and fifth place respectively.

In inclusive school 7, it can be observed that both the teacher and parents are satisfied with 'location' and for other areas they expressed different opinions.

In inclusive school 8, both the opinions of teachers and parents are matching in 4 different areas, according to order of importance, the area 'facilities' needs to be improved first, furniture & equipment second, basic care & hygienic in the sixth place and location in the seventh place.

In inclusive school 9, 'furniture & equipment' is the area to be improved first according to the opinion of both parents and teachers and then 'Basic care & Hygiene'.

A study by Rajesh and vijetha (2008), assessed the physical environment of special school. A checklist was prepared, administered on teachers and principal of respective four special schools. The 'Physical environment - checklist' was able to bring out the strengths and weakness areas of school's physical environment and the order of improvement to be made was also suggested. In all the 9 inclusive schools, it can be observed that the area which is satisfied or rated high by both parents and teachers in majority of schools i.e. four schools is location and the area which is rated low is 'furniture and equipment'. From the above discussion, it can be concluded, that in inclusive schools, where the opinions of teachers and parents are matching those areas may be considered as true and necessary measures may be taken to improve them accordingly.

## CHAPTER V

### SUMMARY AND CONCLUSIONS

Education is the right of every individual. Schools are the formal places where learning takes place and environment of the school has a greater impact on all the children studying in it. In a country like India where number of children with special needs are more and the resources to handle them are limited, the best available option is inclusive education. The need of the hour is to find what is best for the child in every given situation. Most of the mainstream educational set-up fails to meet the needs of the children with special needs and thus exclude them from the regular set-up. It makes no sense to bring them back unless changes have been made. For Inclusive Education to be successful many factors need to be given importance and one among them is physical environment. The physical environment of the classroom is not the determining factor in child's learning, but it can enhance or limit learning (Lorton, 1979)

If children with special needs are enrolled in inclusive schools without barrier free environment, it might lead to poor performance of children. Therefore, assessment of physical environment of schools on a regular basis with a motto to improve the weakness areas may result in providing barrier free environment which includes various types of furniture, equipments like audio-visual aids, toilets etc

According to RTE - 2009 act implementing inclusive education at various stages like primary, secondary education through central and state government together has become mandatory. There is hardly any assessment being made about the physical environment of inclusive schools in India to promote effective and functional educational activities. Hence an attempt is hereby made by the present researcher to assess the physical environment.

The present study mainly aimed at administering the adapted Physical Environment Checklist on teachers and parents of inclusive schools for children with hearing impairment in Mysore and to discuss the order of improvements to be made as per their opinions.

The results of the study clearly depict that all 9 inclusive schools for children with hearing impairment in Mysore. Physical environment to promote inclusion in terms of different areas are not completely effective schools. The checklist pointed out lagging areas and strengths from teachers and parents perceptions which may be worked upon to improve the physical environment of the schools to become role model inclusive schools. It is also discussed that four inclusive schools are having better location. Remaining inclusive schools needs improvement in areas Furniture and Equipment, facilities and instructional space.

**Limitations of the study:**

1. Checklist for students was not prepared considering the problem faced by children with hearing impairment in reading and marking the statements.
2. Even though the details of other variables like gender, age, teaching experience, qualification were collected, discussions were made based on areas only.

**Recommendations:**

1. Checklist to assess physical environment could be adapted in local languages.
2. Checklists to assess different other areas could be prepared.
3. The strengths and weak areas in terms of physical environment brought out by the checklist may be introspected for improvement.
4. Checklists for school administrators and other stakeholders may also be prepared.

## Appendix I

### Information to Be Filled In By the Teacher

1. Name of the school : \_\_\_\_\_
2. School's Address : \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
3. Teacher's Name : \_\_\_\_\_
4. Phone Number : \_\_\_\_\_
5. Age : \_\_\_\_\_
6. Gender: \_\_\_\_\_
7. Educational Qualification : \_\_\_\_\_
8. Teaching Experience : \_\_\_\_\_
9. Teaching Experience in the present school : \_\_\_\_\_
10. Number of children in your class: \_\_\_\_\_
11. Are you a parent of child with hearing impairment? Yes/No

### **Directions:**

1. Read each statement carefully.
2. Please tick ( ✓ ) whichever statement you feel is most appropriate.

### **Note the abbreviations used (only scoring purpose)**

L- Location,	N-noise,	B-building,
I-instructional space	F & E ó furniture& equipments	
B & H- basic care & hygiene	F- Facilities	

**Note:** When the checklist was given to teachers, no abbreviations or the areas of the statements were mentioned giving no hint for teachers.

### Check list for appraisal of Physical environment

S. No	STATEMENTS	YES	NO
1	This school is located in a place away from too much of noise.(L)		
2	The school has good water facilities.(F)		
3	There are no powerful sources of external noises ( ex. Rail, Road, Aircraft, etc) (N)		
4	The school has its own laboratory facilities.(F)		
5	The school building as an formal school.(B)		
6	The school has a separate room for extracurricular activities.(F)		
7	The school has fire extinguishers & Safety Gadgets.(F)		
8	The school has computer lab facility.(F)		
9	Furniture used for children are suitable to children's height.(F&E)		
10	Sound absorbing materials are used in the classrooms to cut down excessive noise. ( For example, use of carpets, curtains etc)(I)		
11	The school provides for 'Group hearing aid's working in good condition. (ex. F.M system, Induction loop system.) (F&E)		
12	Cooking, drinking water and eating areas in the school are kept clean. (B&H)		
13	This school's address can be traced easily by outsiders (new visitors).(L)		
14	This school has its own library.(F)		
15	Most of the classrooms inside the school are away from internal noise sources (ex. Play ground, toilets, kitchen, etc ) (N)		

S. No	STATEMENTS	YES	NO
16	This school has its own kitchen and dining hall.(F)		
17	The construction of the school building is old. (B)		
18	This school has a separate staff room for the teachers.(F)		
19	There is enough lighting and ventilation in the classrooms.(I)		
20	This school has a separate Principal's room.(F)		
21	The classrooms in the school are orderly, numbered and can be easily identified (ex. VII class, IX class) (I)		
22	Is the furniture for the staff sufficient? (F&E)		
23	Toileting area meets basic sanitary condition. ( ex. Toilets thoroughly cleaned with some disinfected liquids etc ) (B&H)		
24	The school has variety of play equipments for riding, climbing, balancing and individual play. (F&E)		
25	The school is easily reachable. (Ex. Bus facility, Auto facility etc.) (L)		
26	This school has a separate office room. (F)		
27	There is no disturbance (unnecessary noise) caused from one classroom to another classroom. (N)		
28	The school has its own School Bus. (F)		
29	The present school building is sufficient enough to accommodate all the classrooms. (B)		
30	The classrooms are well decorated to promote aesthetic sense. ( ex. For display of teaching learn materials like charts, models etc) (I)		

S. No	STATEMENTS	YES	NO
31	The school has its own Assembly hall (prayer hall ) (F)		
32	The seating arrangement of the children of the children in the class rooms is quite comfortable. (semicircular, L-shaped, allowing free movement etc ) (I)		
33	First aid box are available in the school & ready for use .(F)		
34	The classrooms and corridors are orderly and well kept. (ex. Floor, windows are cleaned and mopped frequently ) (B&H)		
35	Age- appropriate materials and equipments are used in the school. (F&E)		
36	The play areas are kept clean and safe. (B&H)		
37	Toilets, basins & mirrors used by children are of childrenø height. (F)		
38	While teaching, teacherø voice is louder than the background noise .(N)		
39	There are spate toiler facilities for teachers & other staff members of the school. (F)		
40	The class rooms in the school are free from reverberation (Echo). (N)		
41	The schoolø play ground includes variety of surface such as soil , sand, grass, hills , flat sections etc .(F)		
42	The walls of the school building are thick & strong providing for sound absorption. (B)		
43	The size and shape of the class rooms are appropriate to number of the children. (I)		
44	The school has a well- maintained garden. (F)		
45	Teaching learning materials are placed at proper position and at proper distance in the class rooms. (ex. Not too crowded with furniture and teaching learning materials ) (I)		



S. No	STATEMENTS	YES	NO
46	Principal's room, Staff room & Office room are cleaned & mopped frequently. (B&H)		
47	Modified chairs and tables are also available in the school to meet children's special needs. (ex. Inclined chairs, writing chairs etc ) (F&E)		
48	Storage of instructional materials in the school is done in a systematic way in a storage space. (B&H)		
49	The school has its own vocational training facility. (F)		
50	Is there any frequent disturbance (unnecessary noise) in the class room because of electrical devices, furniture, windows etc. (N)		
51	The school has its own speech therapy room.(F)		
52	The school building is neatly painted and well maintained. (B)		
53	The school has its own Audio logical evaluation room. (F)		
54	The building structure is sound absorbing. (B)		
55	There is proper storage space for teaching learning materials in the classrooms. (I)		
56	The school also provides for computer software, speech trainer for improving speech and language skills. (F&E)		
57	The school has an audio- visual room. (F)		
58	The school also provides for multimedia projector. (F&E)		
59	The electrical appliances (A.C / Computer etc) are regularly checked and oiled for reducing the unnecessary produced by them. (B)		
60	The school has parking facility for two wheelers & four wheelers. (F)		

## Appendix II

From:  
R.RAJASEKHARA GOUD  
M.S.Ed (HI) Student  
All India Institute of Speech & Hearing  
Mansagangotri, Mysore-06  
E-Mail:- [sekhar.wnp@gmail.com](mailto:sekhar.wnp@gmail.com)

To

.....  
.....

Sub: Request to permit your school teachers to answer the **Physical Environment- check list** – reg.

Respected Sir/Madam,

The All India Institute of Speech and Hearing is an autonomous Institution working for the rehabilitation of persons with communication disorders under the Ministry of Health & Family Welfare, New Delhi. Manpower development is one of the objectives of our institute. As a part of this, we are conducting M.S.Ed (HI), M.Sc, & B.Sc (Speech & hearing) at our Institute. One of our trainees doing his research work as a part of M.S.Ed (HI) course. Mr. Rajasekhargoud has taken the topic 'Appraisal of Physical environment of Inclusive schools for Children with Hearing impairment in Mysore' for research under the guidance of Ms. Vijetha, Lecturer - Dept. of Special Education.

For this purpose you are requested to permit him to distribute 'Physical Environment check list' to your school teachers. He would personally collect all the checklists from your teachers within a week's time.

Thanking you in anticipation.

Yours sincerely

Ms. P. Vijetha  
Lecturer of Special Education.  
AIISH, Mysore.

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