

Science Teaching Amenities in Some Rural Secondary Schools and Role of NCRI

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KEY WORDS Science education; science teaching amenities; mobile science laboratory; National Council of Rural Institutes.

ABSTRACT This paper is based on the recent school wise data obtained from a survey on availability of science teaching amenities like weighing balance, biology box, lens, magnet, microscope, number of science teachers, their educational qualification and access to common facilities like electricity, telephones, computers etc. in some secondary rural institutes in the district of Birbhum, West Bengal. The result shows wide disparities in level of availability of these essential amenities for science teaching in rural and urban institutes. It has been suggested that National council of Rural Institutes should have a fresh look into the whole aspect. As near term solution, the concept of mobile science laboratory or establishment of some rural science centre may be considered. Change of curriculum with an emphasis on out side classroom science teaching has also been discussed.

Table 1: Questionnaire

1. Name of the School : Bhabanipur S. N. High School.
 2. Address of the School : P.O – Bhabanipur, Dist – Birbhum, Block – Rajnagar.
 3. Total Number of Students : 732
 4. Status of Science Teachers :

Teachers Name	Age	Sex	Teaching experience	Educational qualification	No. of Science class per week
B.C. Garaih	44	Male	17 yrs	B. Sc. (Hons. in Physics) B. Ed	22
A. Adhikari	34	Male	5 yrs	M. Sc. (Math) B. Ed	24
K. K. Mondal	24	Male	3 yrs	B. Sc. (Hons in Bio. Sc.)	12

5. Modern amenities available	Yes	No
a. Computer	-	✓
b. Telephone	-	✓
c. Electricity	-	✓
d. Pipe line water supply	-	✓
e. Practical Room	-	✓

Table 2: Questionnaire

1. Name of the School : Brahmankhanda B. P. High School.
 2. Address of the School : Vill + P.O – Brahmankhanda (Basapara), Dist – Birbhum.
 3. Total Number of Students : 1034
 4. Status of Science Teachers :

6. Other equipment's		
a. Weighing Balance	-	✓
b. Test tube	-	✓
c. Beakers	-	✓
d. Laboratory Gas	-	✓
e. Burner	-	✓
f. Spirit Lamp	-	✓
g. Thermometer	-	✓
h. Litmus Paper	-	✓
i. Funnel	-	✓
j. Filter Paper	-	✓
k. Microscope	-	✓
l. Lens	-	✓
m. Magnet	-	✓
n. Sonometer	-	✓
o. Resistance Box	-	✓
p. Biology Box	-	✓

Teachers Name	Age	Sex	Teaching experience	Educational qualification	No. of Science class per week
D. Hazra	51	Male	21 yrs	B. Sc. B. Ed	24
S. Ghosal	44	Male	21 yrs	B. Sc. B. Ed	24
A. K. Das	39	Male	16 yrs	B. Sc (Bio) PGBT	16

5. Modern amenities available	Yes	No
a. Computer	-	✓
b. Telephone	✓	-
c. Electricity	✓	-
d. Pipe line water supply	-	✓
e. Practical Room	✓	-

6. Other equipment's		
a. Weighing Balance	✓	-
b. Test tube	✓	-
c. Beakers	✓	-
d. Laboratory Gas	-	✓

e. Burner	✓	-
f. Spirit Lamp	-	✓
g. Thermometer	✓	-
h. Litmus Paper	✓	-
i. Funnel	✓	-
j. Filter Paper	-	✓
k. Microscope	-	✓
l. Lens	✓	-
m. Magnet	✓	-
n. Sonometer	-	✓
o. Resistance Box	-	✓
p. Biology Box	✓	-

Table 3: Questionnaire

1. Name of the School : Jadavpur Bandhab High School
 2. Address of the School : Sattore. (P.S. Panrui)
 3. Total Number of Students : 400
 4. Status of Science Teachers :

Teachers Name	Age	Sex	Teaching experience	Educational qualification	No. of Science class per week
P. Mondal (H.M)	40	Male	13 yrs	M. Sc. (Physics) B. Ed	14
S. Sarkar	54	Male	26 yrs	B. Sc. BT.	26
C. Ghosal	37	Male	4 yrs	M. Sc. (Zoo), B.Ed.	26
S. Saha	38	Male	5 yrs	B. Sc. (Bio), B. Ed.	26

5. Modern amenities available	Yes	No
a. Computer	-	✓
b. Telephone	-	✓
c. Electricity	-	✓
d. Pipe line water supply	-	✓
e. Practical Room	-	✓
6. Other equipment's		
a. Weighing Balance	✓	-
b. Test tube	-	✓
c. Beakers	✓	-
d. Laboratory Gas	-	✓

e. Burner	-	✓
f. Spirit Lamp	✓	-
g. Thermometer	-	✓
h. Litmus Paper	-	✓
i. Funnel	✓	-
j. Filter Paper	✓	-
k. Microscope	-	✓
l. Lens	-	✓
m. Magnet	-	✓
n. Sonometer	-	✓
o. Resistance Box	-	✓
p. Biology Box	-	✓

Table 4: Science Teaching Amenities available at these Schools

Total Number of School = 41

Amenities	Number of Schools having this amenities	% of Schools having this amenities
1. Computer	-	-
2. Telephone	17	50
3. Electricity	18	53
4. Pipe Line water supply	1	3
5. Practical Room	4	12
6. Weighing Balance	19	56
7. Test Tube	24	71
8. Beakers	25	74
9. Laboratory Gas	-	-
10. Burner	10	29
11. Spirit Lamp	20	59
12. Thermometer	20	59
13. Litmus Paper	19	56
14. Funnel	27	79
15. Filter Paper	24	71
16. Microscope	15	44
17. Lens	24	71
18. Magnet	27	79
19. Sonometer	3	9
20. Resistance Box	5	15
21. Biology Box	24	71

