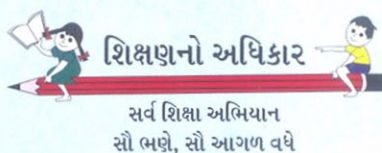


# INTEGRATED REMEDIAL TEACHING

Gujarat - 2012



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# Executive Summary

In Gujarat State, Gunotsav is being implemented since 2009 with the aim to understand the status of primary education. In response to the Gunotsav program, integrated remedial teaching was launched for three months starting from December 21, 2011 to March 31, 2012 to provide need-based learning opportunities to the students in all the primary schools. Integrated remedial teaching was planned for the students who had attained 0-4 marks in the three subjects at the Gunotsav stage.

This report focuses on the evaluation of the integrated remedial teaching. Pre-test data was collected by the teachers themselves on the basis of Gunotsav 2011 results. Post test data was collected by CRC Coordinators from the school by assessing randomly selected students from each class of standard 2 to 8. The BRPs have collected data for validation from 10 per cent of the total schools both before and after integrated remedial inputs. Sampling of these 10 per cent was done at the state level. Process and input related data was also collected by UNICEF consultants during completion of integrated remedial teaching from 115 schools in 14 districts.

The pre and post analysis was done for reading, writing, numeracy, English reading and English writing. The whole State data revealed that students who indicated low achievement levels at pre test stage, improved after sustained inputs, and at the post test level moved to a higher level of performance. The data indicated that 42 per cent students have been mainstreamed in reading and writing, 40 per cent students showed improvement and are mainstreamed in numeracy and 27 per cent and 26 per cent of the targeted students improved and have been mainstreamed in English reading and English writing respectively.

The BRP data indicated that 58 per cent students remained in the same interval of 0 to 4 marks in reading. Hence 42 per cent were mainstreamed in reading. 33 per cent students showed improvement and were mainstreamed in writing and 20 per cent of the targeted students improved and were mainstreamed in

numeracy. English reading and English writing showed negative trend. Numbers of students belonging to the target audience (0 to 4 marks interval) have increased after the program. The results were therefore analyzed to find the reason for this. One to one comparison of students' achievement for pre and post test was done and found that the data of pre test (generated by teachers and verified by CRC-BRC Coordinators) were wrong. It might have happened that teachers gave data without assessing individual child and CRCC also might have not verified the data at the pre-test time.

The BRPs collected the data at post stage level from 10 per cent schools, but all 100 per cent students from the specific classes were covered. Considering this sample the results of the BRP data (post test), for standard 2 to 8 revealed that 87 per cent students scored 5 to 10 marks in reading, writing, and numeracy at the post test level. Therefore, 13 per cent students in standard 2 to 8 were still remaining in the Target Group of Integrated Remedial teaching. The students of standard 6 to 8 also indicated that in English reading and writing, 74 per cent of them scored well; thus 26 per cent remained in the Target Group.

The performance of students between Districts has also been compared. For this section average number of students in 0-4 category and in 5-10 category was calculated irrespective of standards. Of these, those districts which had more per cent of students in 5-10 category and less in the 0-4 category were considered as ones with maximum performance, and those at the other end of the spectrum were considered as ones with minimum performance. From this list the first five districts indicating better performance were; Patan, Banaskantha, Kutch, Dahod and Anand. The last five indicating lower performances were; Porbander, Junagadh,

Bharuch showing low performance in all subject areas; next was Vadodara indicating poor performance in four areas; followed by Surat in three areas.

The post test data (collected by CRC Coordinators) of the State as well as the 10 per cent collected by BRPs indicated the same trend for reading, writing, and numeracy for standard 2 to 8. The scores from 0-4 have students in increasing order in both sets of data. At the same time the data by BRPs indicate more percentage of students scoring 0 marks as compared to the State data. Positively the data by BRPs also indicated more per cent of students scoring 4 marks as compare to the State data. Thus the State data is validated for all subject areas, overall indicating improved performance of students at the post test level. The State data of 6 to 8 standard students for English reading and writing indicated positive trend, whereas the trend was negative in BRPs data. Percentage of students scoring 0 to 4 marks in post test was higher than percentage of students scoring 0 to 4 marks in pre test. This discrepancy could have been as a result of improper assessment of students at the pre test level; and CRC Coordinators also might not have verified the data.

The results of the data collected by UNICEF consultants revealed that the exercise of assessing students and then providing inputs to students with low levels of learning was good. It helped in better learning for students. At the same time distribution and utilization of grants in time should be emphasized. The teleconferences were helpful to teachers in performing their role better. Teachers need to use more student friendly, development promoting methodology of teaching. Use of innovative teaching aids should be part of a regular classroom program.



# INTRODUCTION



The State of Gujarat has identified five themes for overall development. The theme for education is 'gyan shakti'. One of the programs of this theme is 'Gunotsav'. In Gujarat State Gunotsav is being implemented since 2009. The aim of Gunotsav is to understand the status of primary education in Gujarat State. All schools of the State of Gujarat are involved in this program. The initiative involves three main activities;

- a. Self assessment by school
- b. Assessment by State officials and
- c. Academic inputs to students who score low on assessment

# About Gunotsav

## 1 About Gunotsav

Over the years through the enrolment drive and 'kanya kelavani' programs, enrolment of the students has increased and drop-out rate has decreased in the State. The retention rate has also increased through the physical infrastructure provided by the State Government to every school like water supply, electrification and sanitation. Thus with the basic infrastructure in place, Gunotsav has been implemented to improve the quality of education and for providing guidance to the teachers and the school. Gunotsav is also a way to analyze the inputs of the School Management Committees (SMCs) in school development plan; as it is envisioned that the community will take ownership of schools which in turn will increase community participation. In Gunotsav 70 per cent

weightage is on educational aspects and 30 per cent on the physical infrastructure of schools as it is important for healthy school environment. Based on the results of evaluation the teachers and schools make further effort for improvement.

### 1.1. Timeline and Process

Gunotsav is planned in two phases:

**Phase 1-** All the government schools self-evaluate themselves. The teachers evaluate the school and learning achievements of students.

**Phase 2-** The officers of the State evaluate 25 per cent of the schools from each block. Officers are provided with the gunotsav kit. These schools are evaluated by the Chief Minister, Cabinet Ministers, IAS, IPS, IFS, 750 officials of the Secretariat and 2,250 officials of the Directorate.

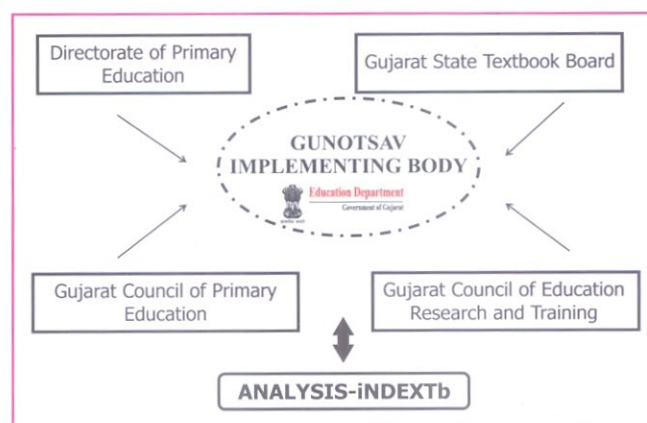


Figure 1: Gunotsav- Implementing Body



# Current Integrated Remedial Teaching in Gujarat



In 2011-12, as part of Gunotsav, 33,967 government schools self-assessed the learning achievements of 58,65,279 students and evaluated 1,99,688 teachers. 3,016 government officials assessed the learning achievements of students and evaluated teachers in 9150 schools. Only teachers who taught Languages and math were assessed.

During the Gunotsav process, the evaluation of the students was done for Gujarati language, English language and Mathematics. The students were given marks on a scale of 0-10. In response to the Gunotsav program, integrated remedial teaching was launched to provide need-based learning opportunities to the students in all the primary schools. Integrated remedial teaching was planned for the students who had attained 0-4 marks in the



## Current Integrated Remedial Teaching in Gujarat

three subjects. This integrated remedial teaching took place for three months starting from December 21, 2011 to March 31, 2012.

It was proposed that these students will be given special opportunities within the regular classroom program. No special classes should be held at separate hours for these students.

The objectives of the Integrated Remedial teaching were;

- Initiate effective classroom learning environment for students showing less learning achievements
- Teacher assessment and capacity building
- Improvement of overall school performance





# Evaluation of the Integrated Remedial Teaching



All the Pre test data is as assessed and reported by the teachers during Gunotsav-self assessment.

The post data in the present report is from three sources.

1. Data collected by SSA. This data was collected by the CRCCs and BRCCs
2. Data from Block Resource Persons (BRPs). In 10 per cent of the schools at the post test level data was collected by the BRPs
3. Data collected by UNICEF consultants. This data was also collected during Integrated Remedial teaching. The UNICEF consultants collected process and input related data from the schools and not the student assessment data.

### 3.1 Data collected by SSA

Pre-test data was collected by the teachers themselves on the basis of Gunotsav 2011 (self assessment) results. Post test data was collected by CRC Coordinators from the school by assessing randomly selected students from each class of standard 2 to 8. Assessment tools of Gunotsav were used by CRC Coordinators while collecting data. Therefore, baseline data (pre-test data) was solely as collected by the teachers and post test data was collected by CRC Coordinators.

### 3.2 Data collected by BRPs

The BRPs collected data for validation from 10 per cent of the total schools both before and after Integrated Remedial inputs. Sampling of these 10 per cent was done at the State level. The list of schools selected by the State was then shared with all BRPs. From the selected 10 per cent schools, all 100 per cent students from specific classes were assessed. BRPs also used the same tools and methodology as used by the CRCCs.

### 3.3 Data collected by UNICEF

The focus of this data was on process involved in giving the Integrated Remedial inputs, use of grant, and use of TLMs. From total 26 Districts of the State, UNICEF consultants collected data from 14 districts. The districts selected were Gandhinagar, Ahmedabad, Kutch, Patan, Banaskantha, Mehsana, Rajkot, Surendranagar,

Bhavnagar, Amreli, Valsad, Surat, Vadodara and Panchmahal. 115 schools distributed across these 14 districts were selected. From each of these schools data was collected from two classes.

Thus, the total sample size comprised of 14 districts, 115 schools and 230 classes. One class each was selected from lower (standard 1 to 5) and higher grades (standard 6 to 8).

The sample schools were selected randomly. Schools of different blocks from the same district were selected. A semi-structured tool was developed to collect the data. The tool focused on aspects related to strategies used by the teacher for remedial work, grant, and advantage of teleconference, visits made by government officials in remedial classes, parent involvement and record keeping. The consultants visited the schools and selected classes where students were given remedial teaching. The information was gathered from the teacher and the school Head Teacher. Interaction was done with the students in general. Availability and use of teaching learning material (TLM), early readers and other books was also observed.

The monitoring yielded both quantitative and qualitative data. The data was coded and categorized. Frequencies, means were calculated for each district and for all the 14 districts in total.



# Results



The results are presented for;

## 1. The total State profile

This data has been collected by SSA which represents the status of Integrated Remedial program at the State level. The pre and post analysis was done for reading, writing, numeracy, English reading and English writing.

## 2. Profile of 10 per cent schools

GCERT was given responsibility for data collection and data analysis. GCERT therefore deputed BRPs as Field Investigators. Tool development and training of Field Investigators was done by GCERT and UNICEF. The data was therefore collected by BRPs which represent the status of Integrated Remedial program for 10 per cent of the State schools. The pre and post

analysis was done for reading, writing, numeracy, English reading and English writing.

### 3. Comparison of State data and data on 10 per cent schools

The post test date of the whole State and the 10 per cent school data collected by BRPs was compared.

### 4. Programme input analysis

This includes use of grant, teaching materials, etc. This data collected by UNICEF is on 115 schools from 14 districts of the State.

## 4.1 The Total State Profile

Hundred per cent (100 per cent) data of the State was collected by the teachers. The data was verified and consolidated by CRCCs at cluster level. The consolidation at block, district

and State level was done by SSA. The State profile is analyzed based on this consolidated data of all the schools across the State.

The results are of performance of students who scored 0 to 4 marks in reading, writing, numeracy at Gunotsav stage i.e. pre test level for standard 2 to 8. In addition the students of standard 6 to 8 were also assessed on English reading and writing. So the results are also presented for these subjects. These students were also assessed after inputs of three months. The results here are comparison of pre and post test data on these students who had low learning levels at the pre test stage.

The pre and post analysis was done for reading, writing, numeracy, English reading and English writing irrespective of standards i.e. for all students in the 0-4 category from 2 to 8 standards. The data indicates (Figure 2, Table 1) that;

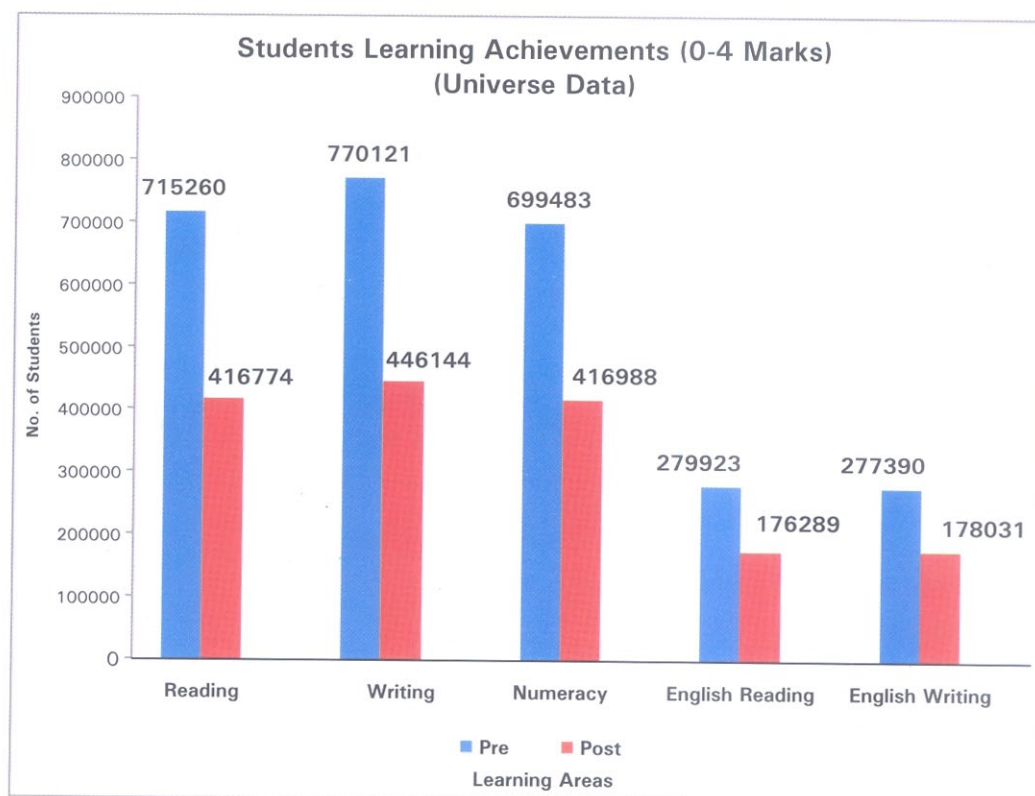


Figure 2: Students learning achievements- Universe data of students with 0 to 4 marks



- At the pre test level 715260 students scored between 0-4 marks in reading. Of these 58 per cent students i.e. 416774 students remained in this category at the post test level also. Thus 42 per cent students were mainstreamed for reading irrespective of standards.
- For writing, at the pre test stage 770121 students scored between 0-4 marks. Of these 58 per cent i.e. 446144 scored between 0-4 marks at the post test stage. Thus 42 per cent students were mainstreamed for writing irrespective of standards.
- Forty per cent (40 per cent) students showed improvement and were mainstreamed in numeracy at the post test stage irrespective of standards.
- Twenty seven per cent (27 per cent) and twenty six per cent (26 per cent) of the targeted students improved and were mainstreamed in English reading and English writing respectively, irrespective of standards.

*Table 1: Students learning achievements- Universe Data of students with 0-4 marks*

	Reading	Writing	Numeracy	English Reading	English Writing
Pre Test	715260	770121	699483	279923	277390
Post Test	416774	446144	416988	176289	178031
%	58	58	60	63	64

## 4.1.1 Reading

The Graph on Reading (Figure 3) indicates that the number of students scoring 0, 1, 2 marks at pre test level in all standards reduced at the post test level; on an average from 48 per cent to 28 per cent. Conversely number of students scoring 3 and 4 marks increased at the post test level as compared to the pre test scores; on an average from 52 per cent to 72 per cent.

## 4.1.2 Writing

The Graph on Writing (Figure 4) indicates that students who scored 0, 1, 2 marks at pre test stage improved and therefore there was an increase in number of students scoring 3 and 4 marks at post test stage. So at post test level number of students scoring 0-2 marks reduced (on an average from 48 per cent pre to post 29 per cent), and number of students scoring 3-4 marks increased (on an average from 51 per

cent to 71 per cent). This was irrespective of standards.

## 4.1.3 Numeracy

The numeracy data also follows the same pattern as the reading and writing data (Figure 5). Irrespective of standards number of students scoring 0-2 marks decreased at the post test level (on an average from 39 per cent to 26 per cent), and number of students at the post test level scoring 3-4 marks increased (on an average from 61 per cent to 74 per cent).

## 4.1.4 English Reading and Writing

In both English reading and writing, for standards 6 to 8 the results indicate an improvement at post test level. Number of students scoring 0-2 marks reduced at the post test level, except for standard 8 English writing. Here the number of students scoring 0 marks

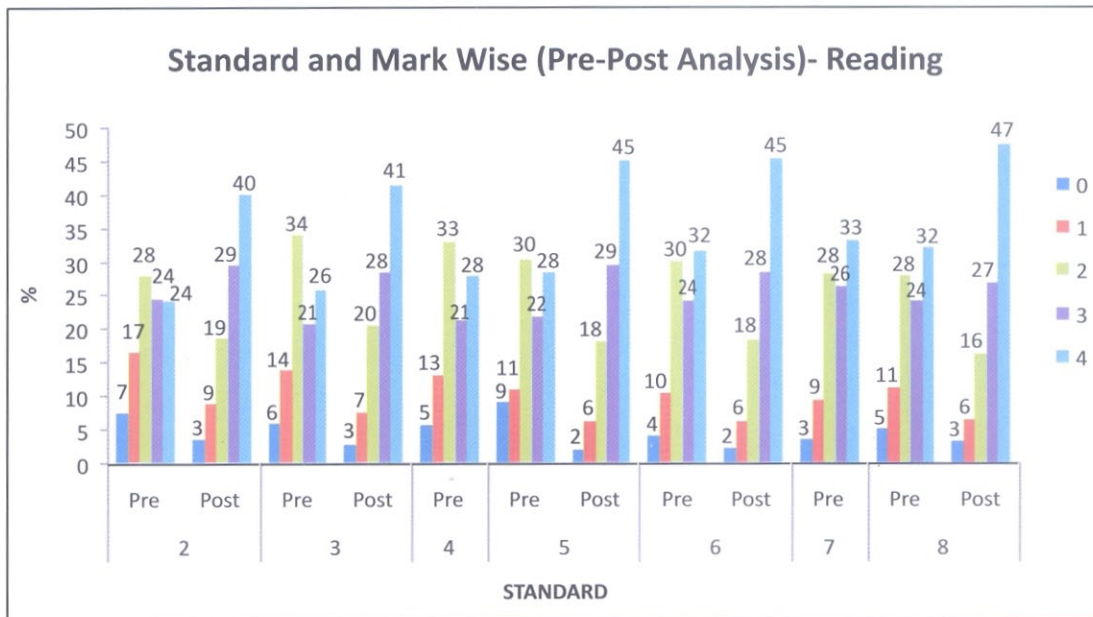


Figure 3: Standard and mark wise; pre-post analysis- Reading

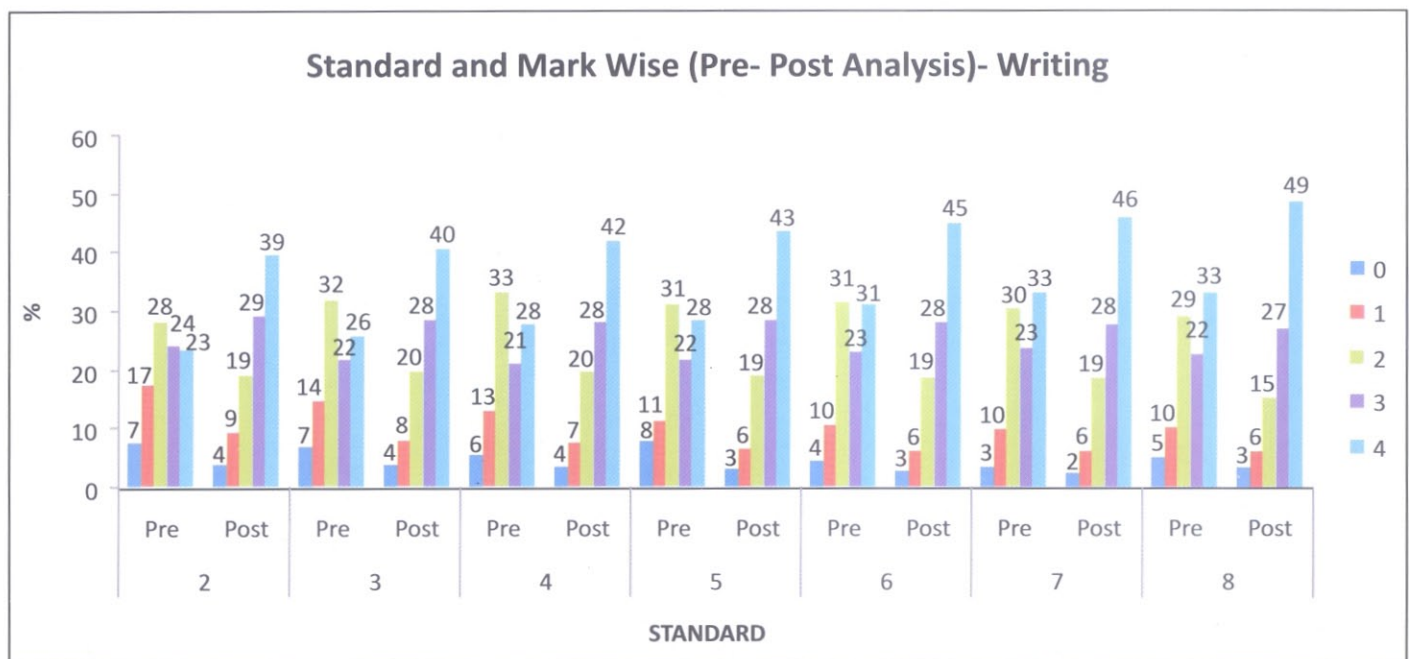


Figure 4: Standard and mark wise; pre-post analysis- Writing



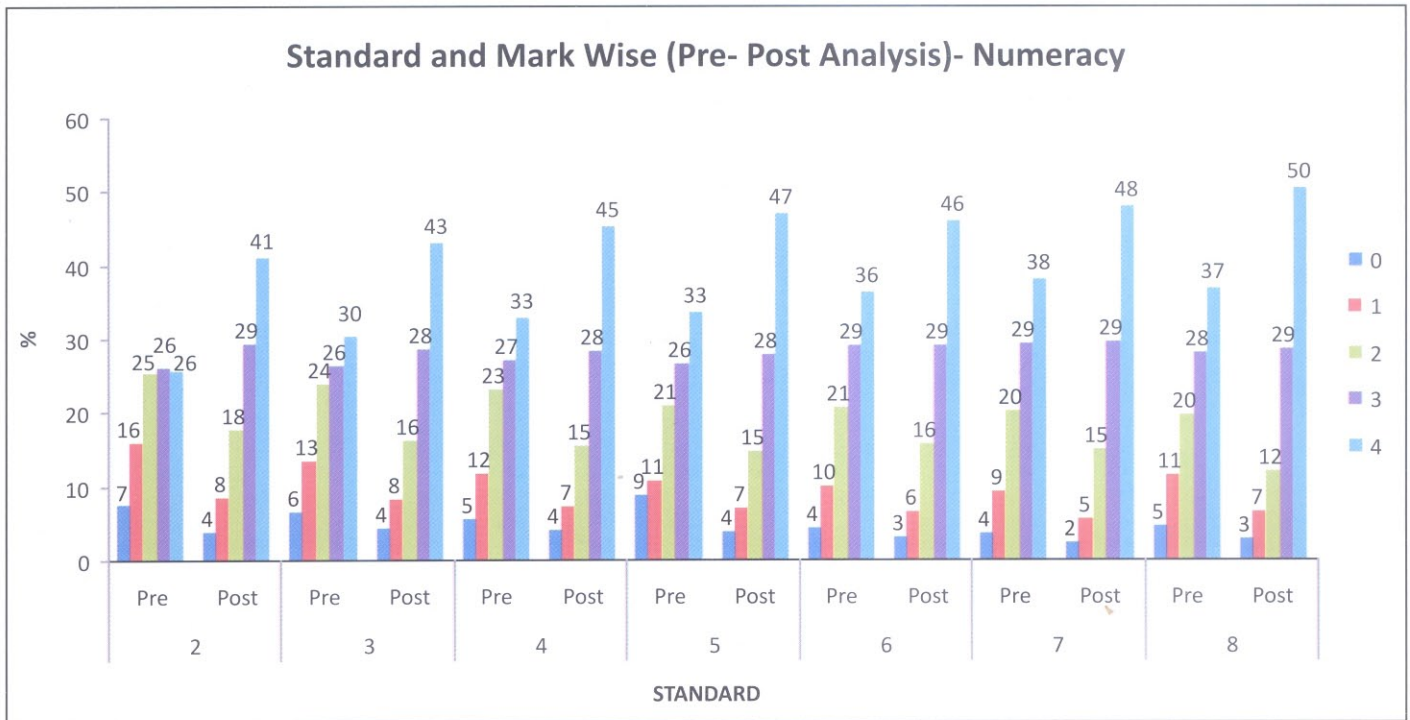


Figure 5: Standard and mark wise; pre-post analysis- Numeracy

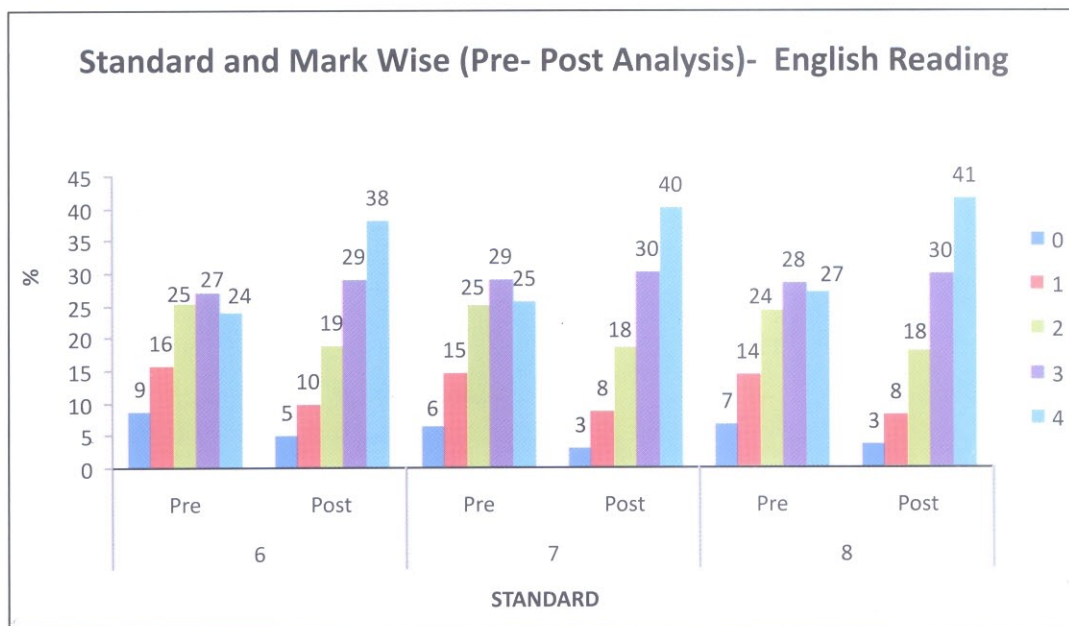


Figure 6: Standard and mark wise; pre-post analysis- English Reading

increased by one per cent (1 per cent). On an average in English reading the number of students scoring 0-2 marks decreased from 47 per cent to 31 per cent; and in English writing from 48 per cent to 33 per cent. Also in all standards number of students scoring 3-4 marks increased at the post test level as compared to the pre test level. On an average the number of students scoring 3-4 marks increased in English reading from 53 per cent to 69 per cent, and in English writing from 52 per cent to 67 per cent (Figure 6 and Figure 7).

## 4.1.5 Summary

Thus the whole State data reveals that students who indicated low achievement levels at pre test stage, improved after sustained inputs, and at the post test level moved to a higher level of performance.

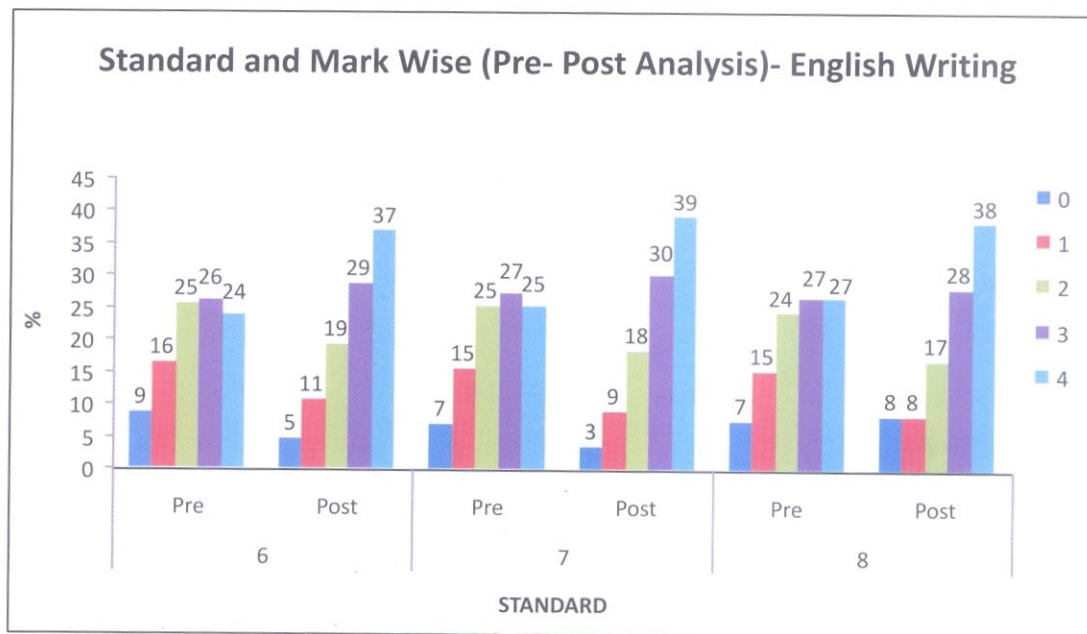


Figure 7: Standard and mark wise; pre-post analysis- English Writing



## 4.2 Profile of 10 per cent Schools

The Integrated Remedial Teaching Program was designed and implemented for those students who scored below 5 marks (that is 0 to 4). Therefore the study tried to analyze the improvement of the focused students after the Integrated Remedial program. The number of students who remained in the 0-4 marks category in various learning areas viz. reading, writing, numeracy, English reading and English writing are shown in the below Table 2 and Figure 8. The data indicates that;

- 58 per cent students remained in the same interval of 0 to 4 marks in reading. Hence 42 per cent were mainstreamed
- 33 per cent students showed improvement and were mainstreamed in writing
- 20 per cent of the targeted students improved and were mainstreamed in numeracy
- English reading and English writing showed negative trend. Numbers of students who belonged to target audience (0 to 4 marks interval) increased after the program. The results were therefore analyzed to find out the reason behind it. One to one comparison of students' achievement in pre and post test was done and found that the data of pre test (generated by teachers and verified by CRC-BRC Coordinators) were wrong. It might have happened that teachers gave data without assessing individual child and CRCC also might have not verified the data at the pre-test time.

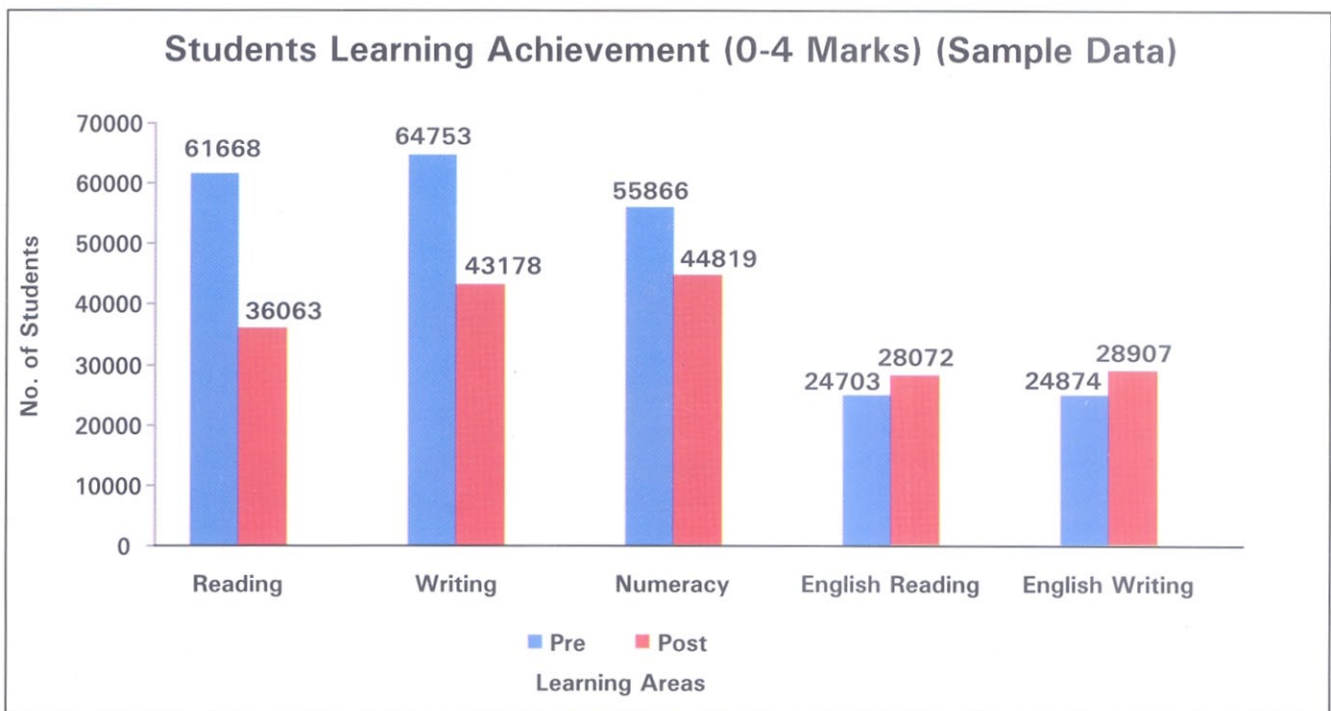


Figure 8: Students learning achievements- Sample data of students with 0 - 4 marks

Table 2: Students Learning Achievements- Sample Data of students with 0 - 4 marks

	Reading	Writing	Numeracy	English Reading	English Writing
Pre Test	61668	64753	55866	24703	24874
Post Test	36063	43178	44819	28072	28907
%	58	67	80	114	116

For comparison of performance of students in 10 per cent schools the pre test data source is same as for the State data. Pre test was conducted by teachers so the data given by the teachers for Pre-test were considered. The BRPs assessed students at the post test level only. Thus considering that group as 100 per cent the results here indicate the per cent of students who have moved at the post test level.

#### 4.2.1 Reading

From the 100 per cent students the BRP data indicates that 11 per cent students (out of all students in standard 2 to 8) remained at the 0-4 level; whereas 41 per cent students scored 5-7 marks level and 48 per cent scored 8-10 marks level. Thus 89 per cent students were mainstreamed as per learning levels for Reading.

Table 3: Distribution of Students Scoring 0 - 10 Marks for Reading at Post test Level

Standard	2	3	4	5	6	7	8	Average
per cent of students scoring 0-4 marks	15	15	12	10	8	7	5	11
per cent of students scoring 5-7 marks	44	42	42	40	40	36	35	41
per cent of students scoring 8-10 marks	41	43	46	50	52	57	61	48

Comparison across districts (Figure 9); suggest that Patan, Dahod, Banaskantha, Anand, Kutch, Navsari, and Mehsana have less number of students in the 0-4 category. They all have lesser number of students compared to the State average of 11 per cent. Thus these districts indicate maximum performance in the area of Reading for students from 2 to 8 standards.

The five districts with more number of students in 0 - 4 category are Bharuch, Porbander, Dang, Junagadh, Jamnagar in that order. These districts therefore indicate minimal levels of performance of students at post test level.



## 4.2.2 Writing

The BRP data of post test for writing indicates that; of the 100 per cent students, 13 per cent remained at the 0-4 mark level, 46 per cent scored 5-7 marks, and 40 per cent scored 8-10 marks. Thus a large majority of students, 86 per cent were mainstreamed i.e. belonged to 5 to 10 marks category.

Table 4: Distribution of Students Scoring 0 - 10 Marks for Writing at Post test Level

Standards	2	3	4	5	6	7	8	Average
per cent of students scoring 0-4 marks	17	16	15	13	11	9	7	13
per cent of students scoring 5-7 marks	46	44	47	48	48	46	46	46
per cent of students scoring 8-10 marks	37	40	38	39	40	45	48	40

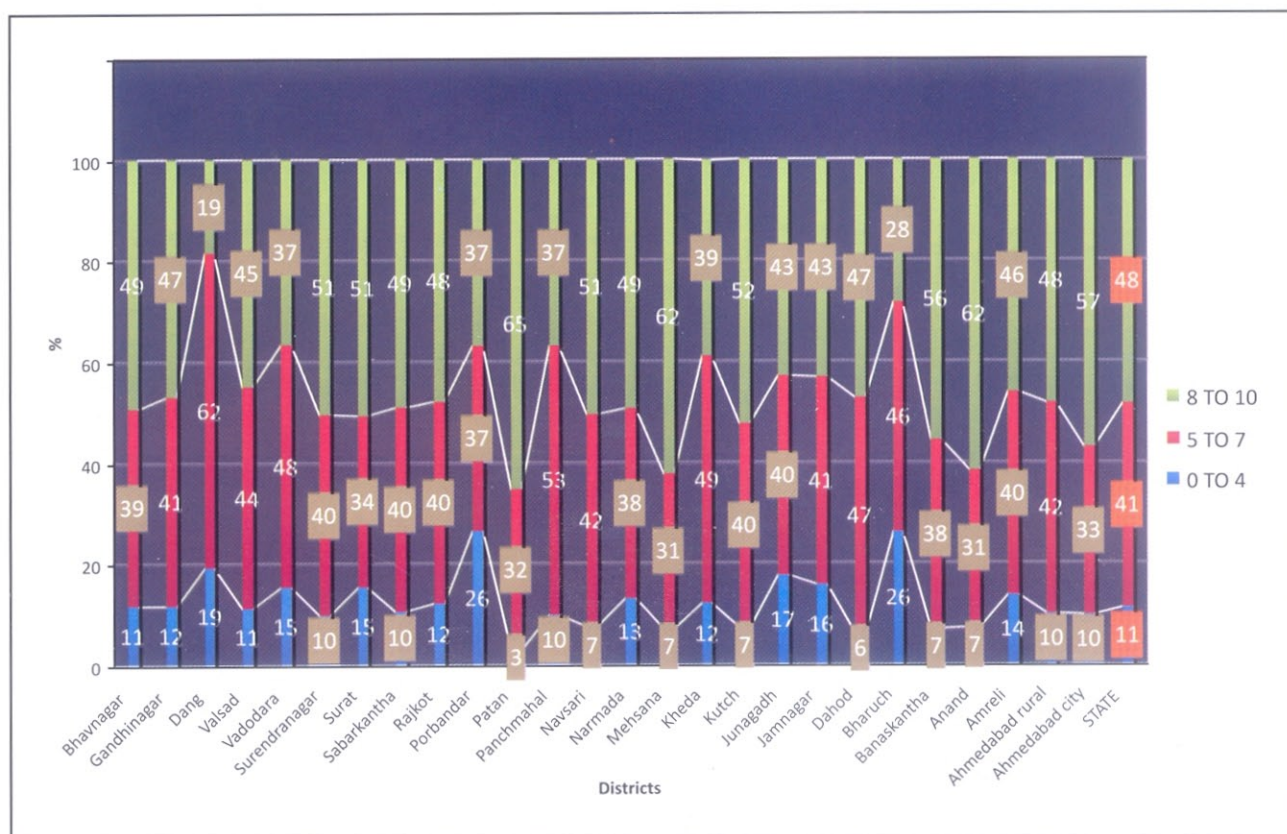


Figure 9: Districts vis-a-vis State (Reading-Post level Analysis)

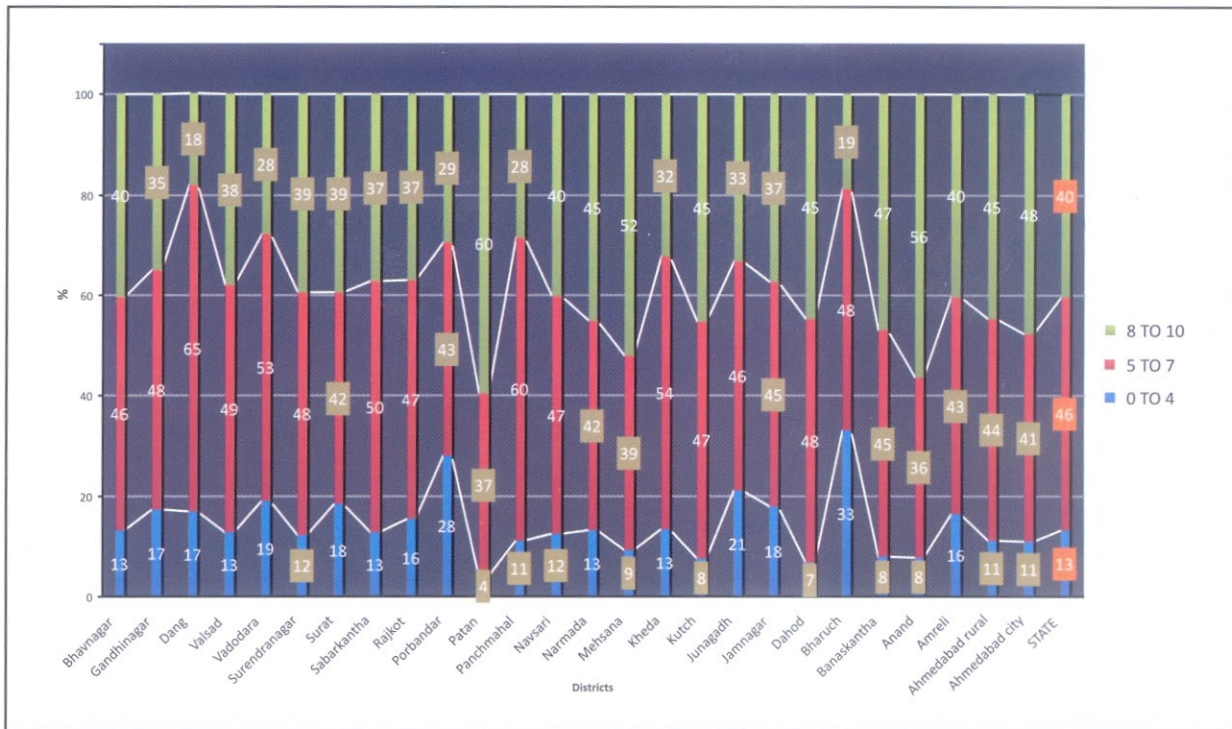


Figure 10: Districts vis-a-vis State (Writing-Post level Analysis)

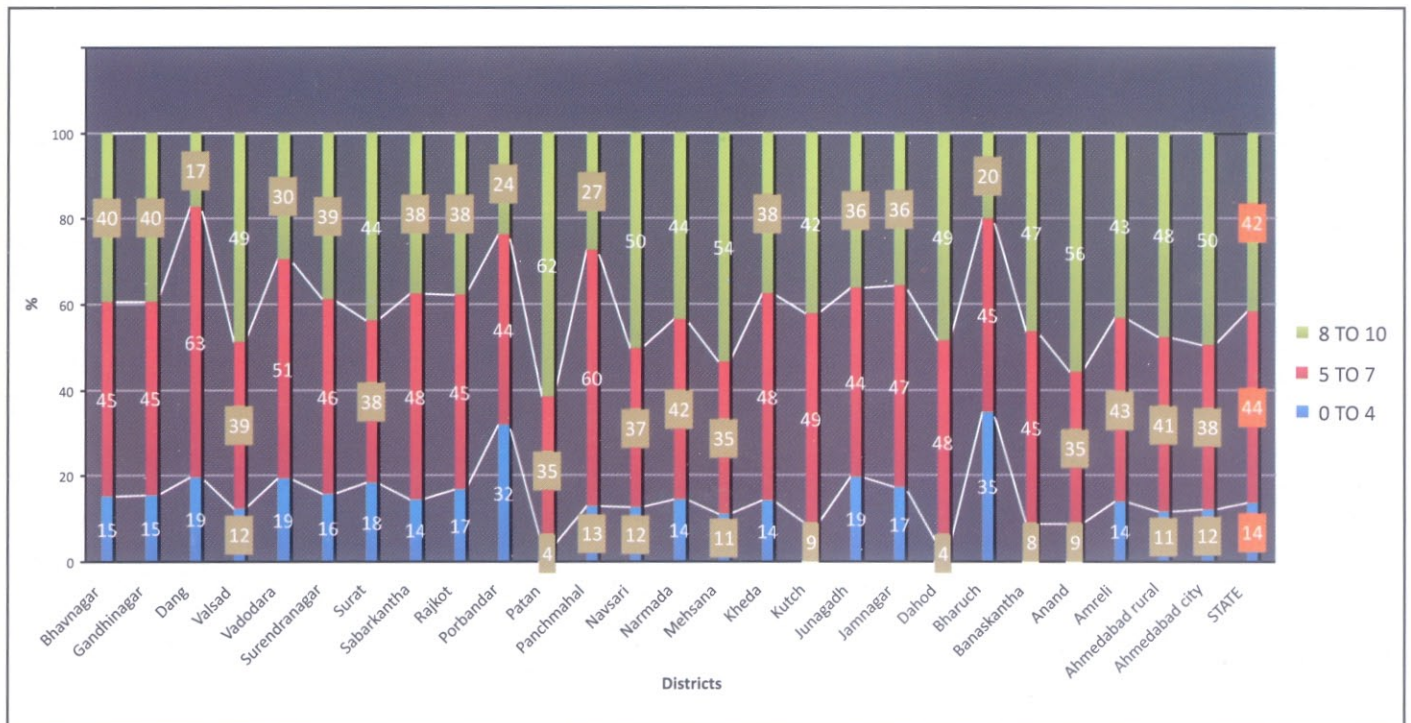


Figure 11: Districts vis-a-vis State (Numeracy-Post level Analysis)



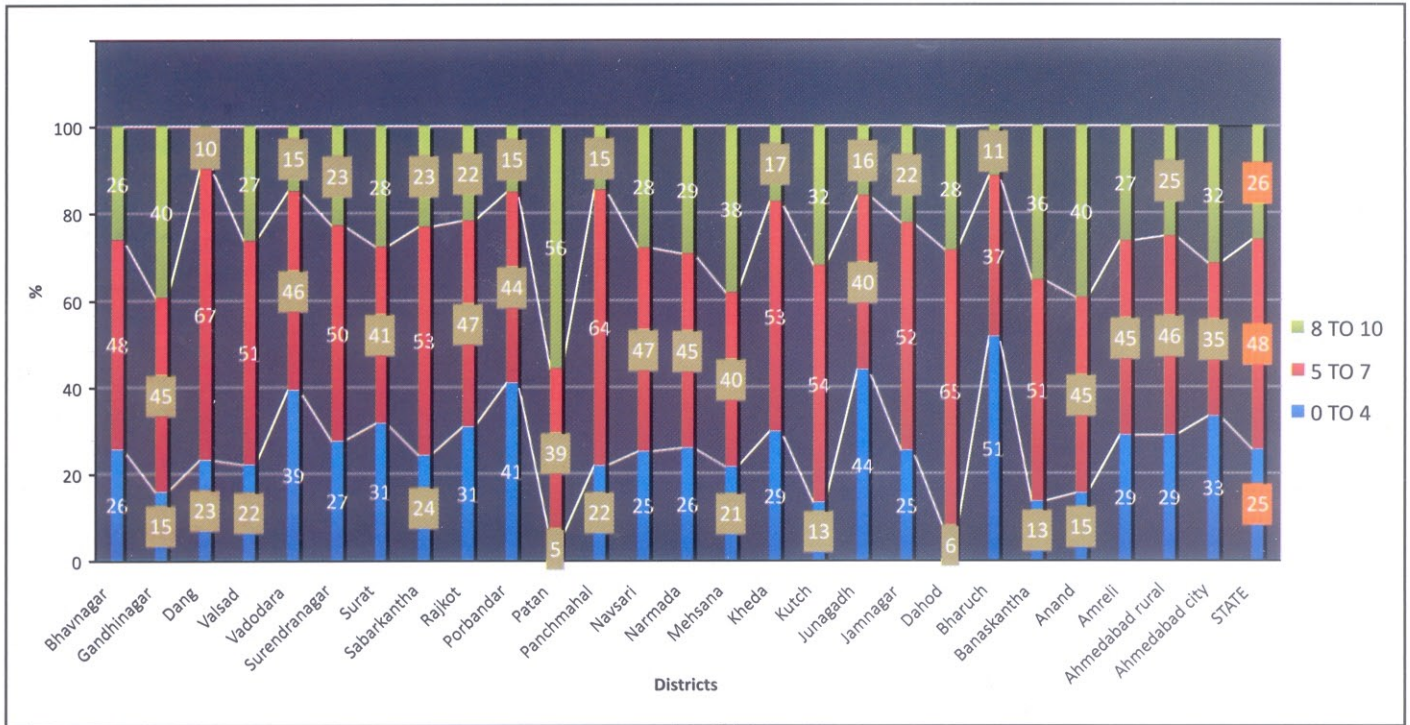


Figure 12: Districts vis-a-vis State (English Reading - Post level Analysis)

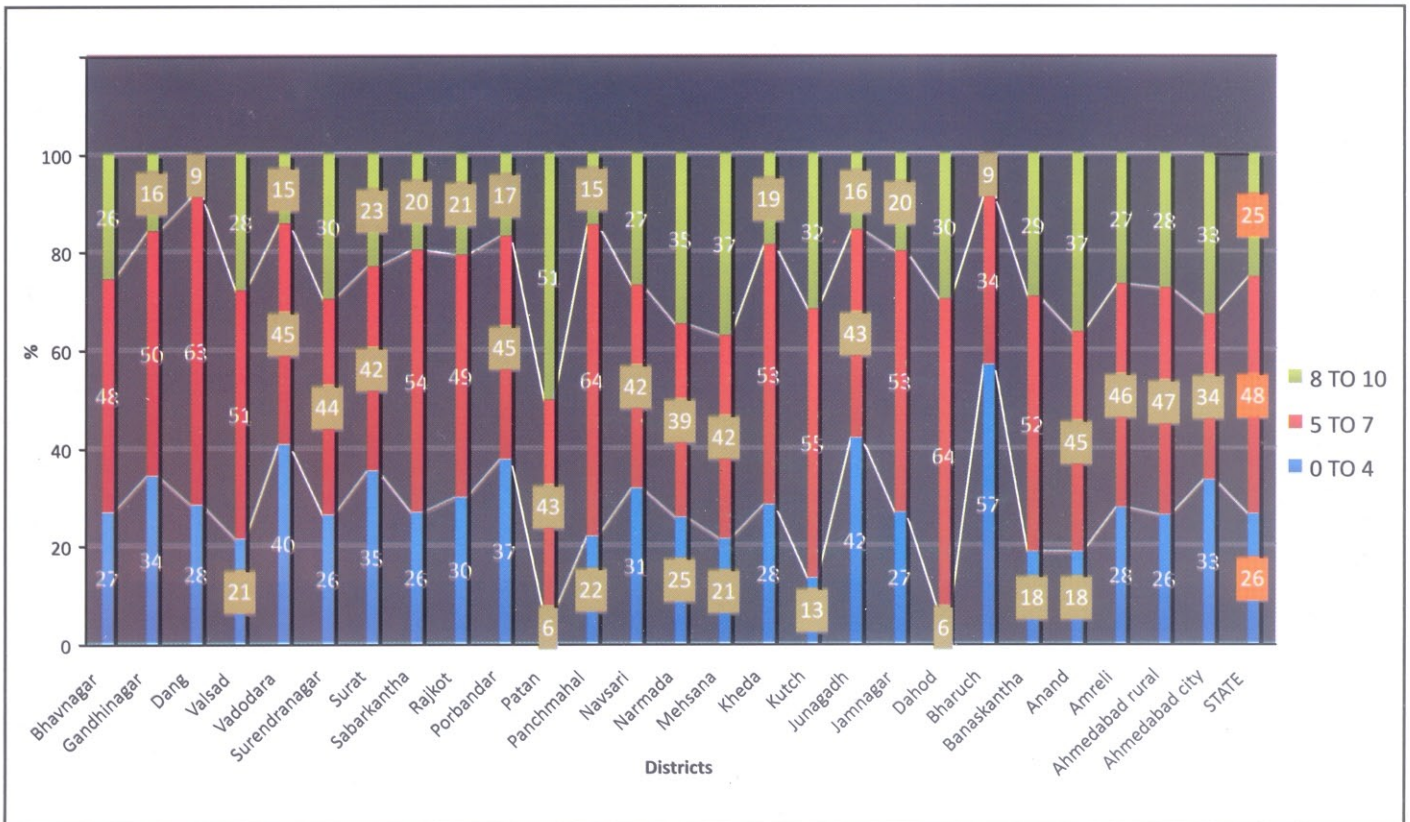


Figure 13: Districts vis-a-vis State (English Writing-Post level Analysis)



Comparison across districts indicates that in the area of writing (Figure 10) five districts that showed better performance are; Patan, Dahod, Banaskantha, Anand, and Kutch. They have least number of students in the 0-4 category. The districts with minimal performance level are; Bharuch, Porbander, Junagadh, Vadodara, Surat, and Jamnagar. They have more number of students in the 0-4 category as compared to other districts and the State average.

## 4.2.3 Numeracy

The data of post test level revealed that most of the students from standard 2 to 8 were

mainstreamed. Only 14 per cent students remained in the 0-4 marks category, 44 per cent students scored 5-7 marks, and 42 per cent scored 8-10 marks.

Comparison of districts in the area of Numeracy (Figure 11) at the post test level indicates that Anand, Kutch, Banaskantha, Dahod and Patan have performed maximally. They have less number of students in 0-4 category. The districts where the performance of students is low are; Bharuch, Porbander, Dang, Vadodara, Junagadh. They indicate more students in the 0-4 category.

Table 5: Distribution of Students Scoring 0 - 10 Marks for Numeracy at Post test Level

Standards	2	3	4	5	6	7	8	Average
per cent of students scoring 0-4 marks	16	15	13	14	14	11	10	14
per cent of students scoring 5-7 marks	43	43	43	45	47	46	46	44
per cent of students scoring 8-10 marks	41	43	44	41	39	43	44	42

## 4.2.4 English Reading and Writing

The students from standard 6 to 8 for English reading indicated reverse trend, as number of students belonging to 0 to 4 marks are more at pre as compared to post test level. The numbers of students belonging to 0 to 4 at pre test level was 24703, whereas the same classes were assessed during post test and it was found that there were 28072 students in the same category, even after three months' programme of Integrated Remedial teaching.

The same reverse trend was observed in English writing also. Total 24874 students were reported for the Integrated Remedial teaching programme (who scored 0 to 4 marks) at pre test level. The numbers of students belong to 0 to 4 marks in the same classes observed at the post test level were 28907. Considering the total number of students

studying in 6 to 8 standard, in English writing 26 per cent were at 0-4 marks level, 48 per cent at 5-7 level, and 25 per cent at 8-10 mark level.

Comparison of districts for maximum performance in English Reading (Figure 12) reveals that Anand, Gandhinagar, Banaskantha, Kutch, Dahod, and Patan have performed well. Students in these districts are less in number in the 0-4 category, lower than the State average. The districts with low performance level are; Bharuch, Junagadh, Porbander, Vadodara, Surat, and Rajkot.

In the area of English writing (Figure 13) the post test results reveal that districts with better performance are; Anand, Banaskantha, Kutch, Dahod, and Patan. The Districts with low levels of performance in English writing are Bharuch, Junagadh, Vadodara, Porbander, and Surat.



*Table 6: Distribution of Students Scoring 0 - 10 Marks for English Reading and English Writing at Post test Level*

Standards	English Reading				English Writing			
	6	7	8	Average	6	7	8	Average
per cent of students scoring 0-4 marks	28	24	22	25	28	25	23	26
per cent of students scoring 5-7 marks	47	49	50	48	47	49	51	48
per cent of students scoring 8-10 marks	25	27	27	26	24	26	26	25

## 4.2.5 Summary

The results of the BRP data, for standard 2 to 8 Grade II to VIII, revealed that 87 per cent students scored 5 to 10 marks in reading, writing, and numeracy at the post test level. Of the total students studying in standard 6 to 8; 74 per cent performed well (scored 5 to 10 marks) in English reading and writing.

The performance of students between districts is also compared. For this section average number of students in 0-4 category and in 5-10 category has been calculated irrespective of standards. Of these, those districts which have

more per cent of students in 5-10 category and less in the 0-4 category are considered as ones with maximum performance, and those at the other end of the spectrum are considered as ones with minimum performance. From this list the first five districts indicating better performance and the last five indicating lower performances are mentioned. On the whole Patan, Banaskantha, Kutch, Dahod and Anand are the better performing districts. Porbander, Junagadh, Bharuch are the Districts showing low performance in all subject areas, next is Vadodara indicating poor performance in four areas, followed by Surat in three.

### 4.3 Comparison of State Data and Data from 10 per cent Schools at Pre and Post Test Stage

This section presents results of data collected by the BRPs. It is a comparison between the Pre data collected by the teachers and post test data collected by the BRPs on 10 per cent schools. The difference in marks (in Table 7) shows the difference between students' achievements in post test minus pre test. Generally in basic skills of reading and writing de-learning is not possible. Even then, this data reveals that this has happened with thousands of students in all five learning areas. It can therefore be assumed that the data collected at pre test level may not be correct. The pre test data was collected by the teachers and was supposed to be validated by CRC Coordinators during their regular monitoring. However from

the results we can assume that CRC Coordinators may not validate the data provided by the teachers. They may to have collected the data from the teachers and consolidated it.

The post test data of the State as well as the 10 per cent collected by BRPs indicate the same trend for reading, writing, and numeracy for standard 2 to 8 (Figure 14-18). The scores from 0-4 have students in increasing order in both sets of data. At the same time the data by BRPs indicate more percentage of students scoring 0 marks as compared to the State data. Positively the data by BRPs also indicate more per cent of students scoring 4 marks as compared to the State data. Thus the State data is validated for all subject areas, overall indicating improved performance of students at the post test level.

Table 7: Miss Match Between Pre and Post Test Data (Reverse Trend)

Difference in MARKS	Difference Reading Total		Difference Writing Total		Difference Numeracy Total		Difference English Reading Total		Difference English Writing Total	
	STU	%	STU	%	STU	%	STU	%	STU	%
-10	130	0.07	115	0.06	60	0.03	18	0.03	11	0.02
-9	83	0.04	132	0.07	210	0.11	53	0.08	79	0.12
-8	387	0.21	497	0.26	489	0.26	192	0.29	207	0.31
-7	370	0.20	621	0.33	697	0.37	371	0.55	450	0.66
-6	989	0.52	1326	0.70	1593	0.85	782	1.17	994	1.47
-5	1754	0.93	2386	1.25	2971	1.59	1598	2.39	2000	2.95
-4	3920	2.08	5335	2.80	5764	3.08	3166	4.73	3462	5.11
-3	8615	4.57	10713	5.63	10990	5.87	5410	8.08	5785	8.54
-2	19410	10.29	22145	11.64	22001	11.75	8647	12.92	9357	13.81
-1	41138	21.81	43669	22.94	42266	22.58	14773	22.07	14655	21.63
0	111866	59.29	103390	54.32	100164	53.50	31929	47.70	30748	45.39
Total	188662	100.00	190329	100.00	187205	100.00	66939	100.00	67748	100.00



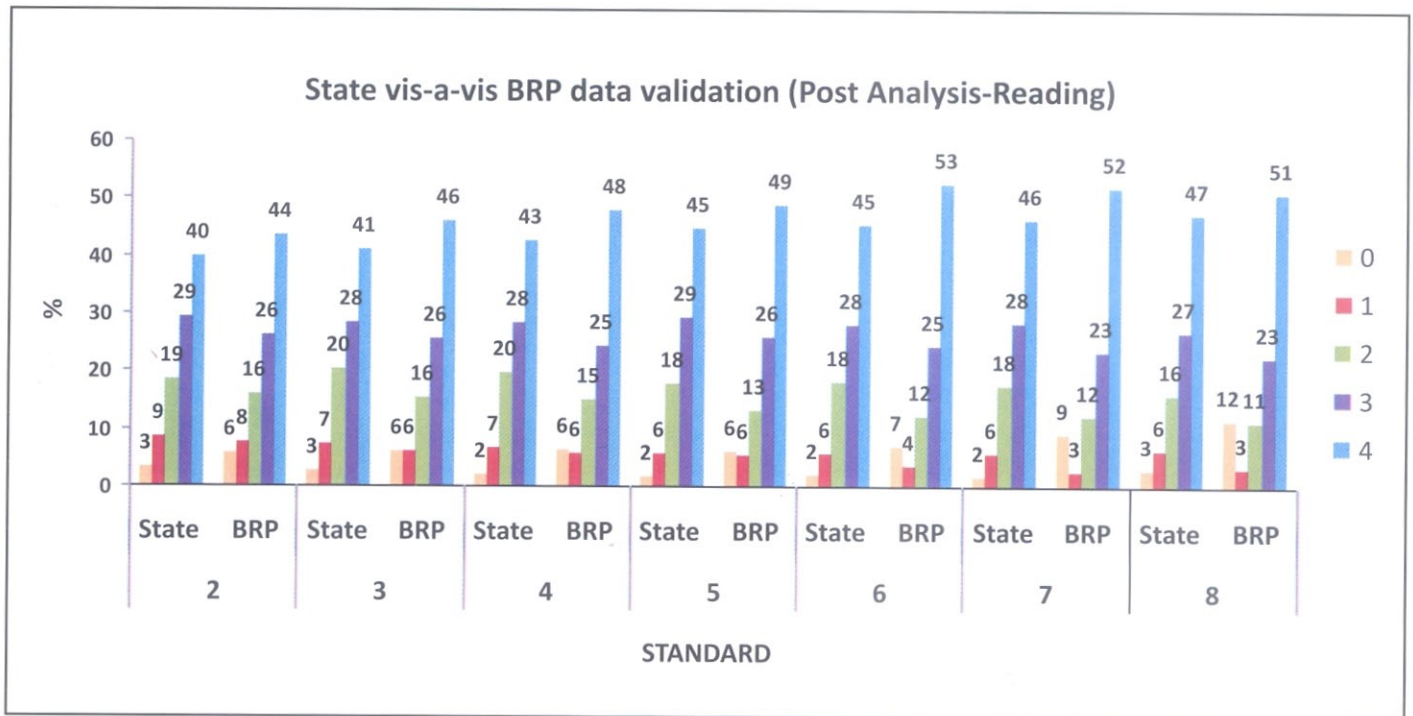


Figure 14: Data Validation- Reading

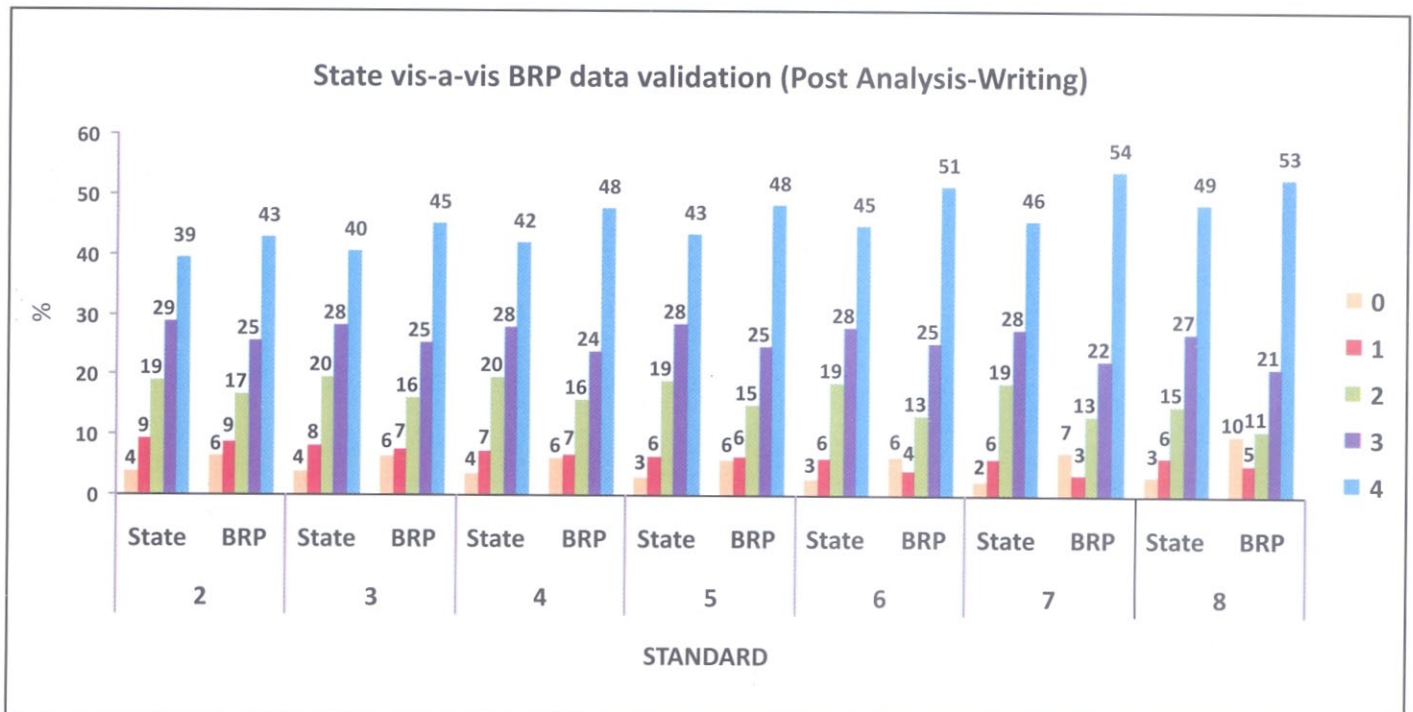


Figure 15: Data Validation- Writing

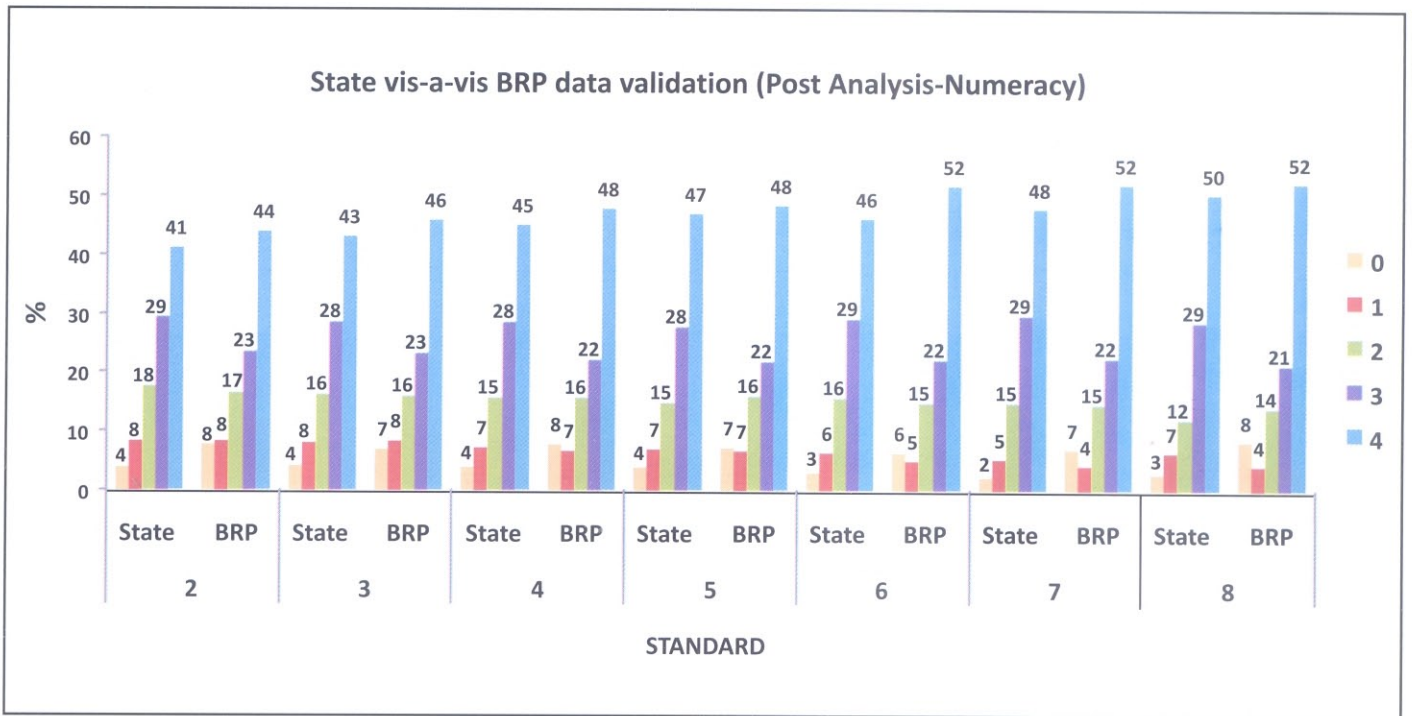


Figure 16: Data Validation- Numeracy

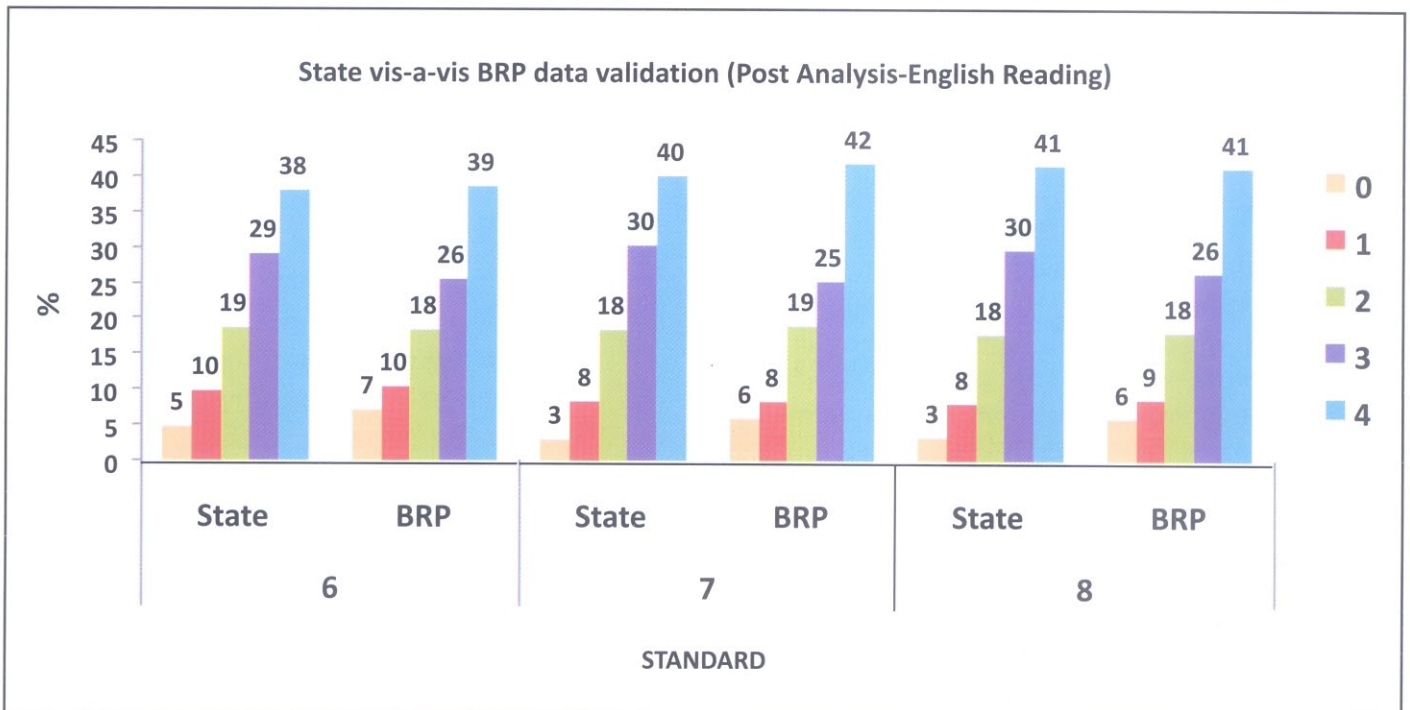


Figure 17: Data Validation- English Reading



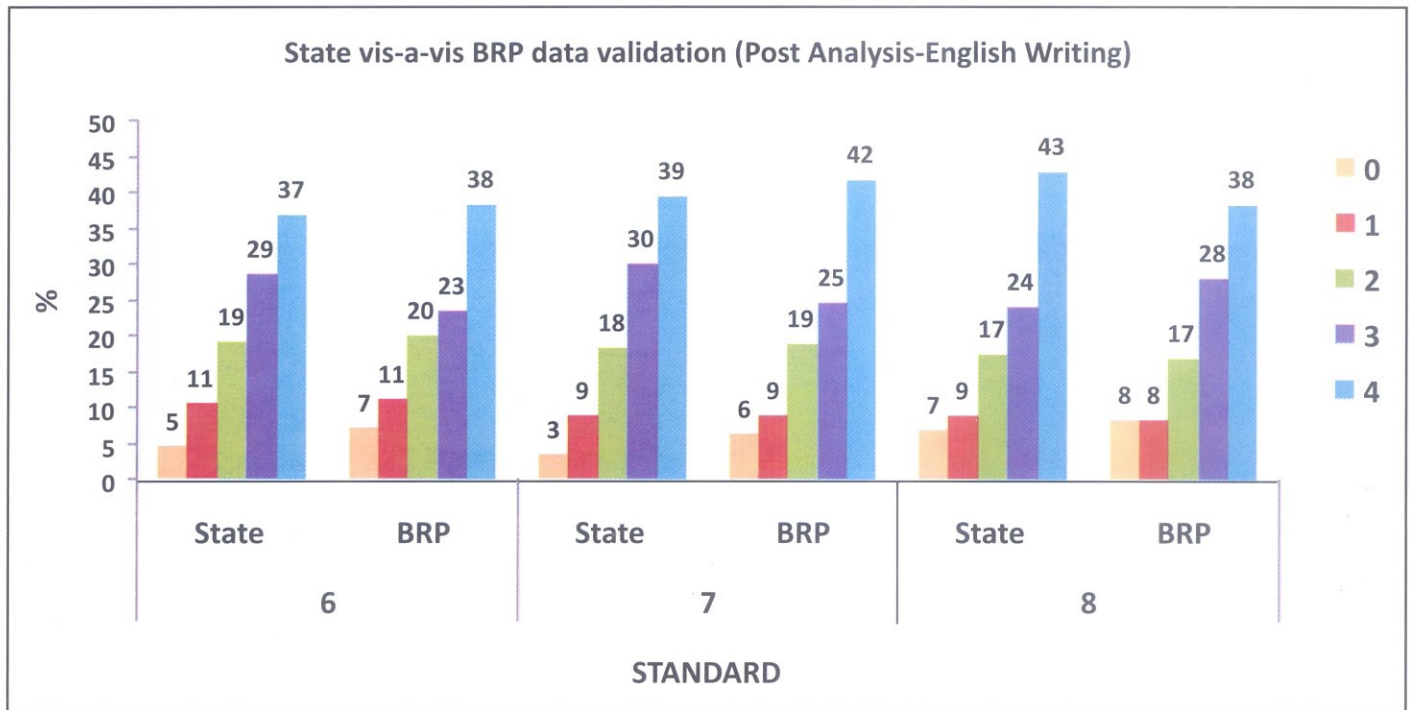


Figure 18: Data Validation- English Writing

The data of 6 to 8 standard students for English reading and writing also indicate the same trend. Specifically the data for English reading from both sets is almost same. At the same time if we compare the average number of students in 0-2 and 3-4 marks categories it indicates that the BRP data shows more number of students in 0-2 category i.e. 31 vs 34; and shows less number of students in 3-4 category i.e. 69 vs. 66. The data for English writing also indicates a trend similar to English reading. The comparison of average number of students indicates more number of students in 0-2 category for BRP data i.e. 33 vs 35; and shows less number of students in 3-4 category i.e. 67 vs 65. At the same time we have to remember that 2 per cent difference between a large set of data and its 10 per cent is not significant. Hence this data is also validated.

Thus the State data is validated and is a true indicator of performance of students.

#### 4.4 Program Input analysis

The data for this section has been collected from the 14 districts of Gujarat namely; Ahmedabad, Amreli, Banaskantha, Bhavanagar, Gandhinagar, Kutch, Mehsana, Panchmahal, Patan, Rajkot, Surat, Surendranagar, Vadodara, Valsad. This data was collected by UNICEF consultants. In all the consultants collected data from 230 classes, representing 115 schools across the 14 districts.

On an average there were 7 classes in each school which had students who required remedial help. The remedial classes in schools visited ranged from one class to 19 classes. On an average the enrolled number of students was 33, of which 18 were boys and 15 were girls. Of the 33 average numbers of students in a class, 9 students were registered in Integrated Remedial classes (IRC). Of these 5 were boys and 4 were girls. On the day of the visit 7 students (77 per cent of total 9) were present; 4 were boys and 3 were girls. Therefore on the day of the visit 22 per cent students who required remedial help were absent.

##### 4.4.1 Use and preparation of teaching aids for Integrated Remedial Program (IRP)

The teachers responded that they prepared and used aids for language (35 per cent), math (14 per cent), and English (2 per cent). They also mentioned readymade aids like black board, *manka ghodi*, *deshi hisaab*, old textbooks as aids they had used. Other activities and materials like color cards, *chitak kaam* were also mentioned. This reflects lack of clarity on the part of teacher for understanding about use of correct aids for learning. Six per cent (6

per cent) teachers responded that they had not used any TLMs.

Thirty six (36 per cent) per cent teachers reported that they had not made any TLMs. Of the ones who had made it 61 per cent responses indicated that they had made TLMs like; *shabd chart*, *vakya patti*.

Observations revealed that in 67 per cent of the classes TLM was in sufficient quantity for the number of students; whereas in 18 per cent classes it was insufficient and in 15 per cent classes no TLM was observed.

Fifty seven per cent (57 per cent) schools responded that they had received the grant for IRP. Twenty seven per cent (27 per cent) responded that they had not received the grant whereas; others were unaware of such a grant. Of the ones who had received the grant, 39 per cent responded they had received but not utilized it, 34 per cent responded that the Head Teacher directly utilized it, 17 per cent received it late. So overall the grant was not utilized by seventy per cent (70 per cent) of the schools visited. Of the schools which had received the grant the cost of the TLM prepared by the teacher ranged from Rs. 2/- to Rs. 1000/- . The mean funds utilized was Rs. 304/-. The data

Table 8: Use of Teaching Learning Materials (in percentage)

Sr. No.	TLMs used	Percent
1	For language	35
2	For math	14
3	For English	02
4	Ready aids (black board, slate pen, <i>manaka ghodi</i> , <i>deshi hisaab</i> , etc)	17
5	Computer and e-modules	02
6	Other ( <i>chitak kaam</i> , color card, etc)	30



reveals that the use of TLM grant is an area where the state should focus on.

Written record of students' work in IRP was available in 74 per cent classes. This written work was over and above their regular class work. In a large number of classes i.e. 26 per cent no written record of students' work in IRP was available. In 62 per cent of the classes students' work was checked by the teachers; and in only 48 per cent classes this work was also corrected or rectified. Thus only in 48 per cent of the observed classes students received guidance and feedback for their work.

#### 4.4.2 Use of LS workbooks and Early Readers

##### *Lekhan Sarjan (LS)*

In 42 per cent classes Lekhan Sarjan workbooks were available. In 12 per cent classes it was not needed whereas; in 46 per cent classes it was not available. From the 42 per cent classes in which it were used; in 61 per cent classes it was checked by the teacher and in 51 per cent classes the teacher rectified the child's work and gave feedback.

##### *Early Readers*

In 45 per cent classes early readers were available. In the rest 55 per cent classes it was not available.

These TLMs were to be used by the teachers as per the guideline given through circular and teleconference also. However, availability and use of these TLMs yet remains an issue where the state should concentrate.





#### 4.4.3 Use of Methodology for IRP

More than fifty per cent teachers (56 per cent) responded that they used different methods for helping students understand the content. Six per cent (6 per cent) responses were for use of technology like; computer, TV and websites. Eighty three per cent teachers reflected use of different methodologies like; group work, demonstration, activity based learning, peer learning, etc. Seventeen per cent teachers responded that they gave personal attention and extra time to the IRP students.

Some teachers also used inappropriate methods like making the students sit separately (4 per cent). Some also mentioned regular use of board (7 per cent), giving tests (3 per cent), use of books (7 per cent) like; early readers and *swadhyaypothi* as special methods used. This reflected their lack of understanding about teaching students who needed special help.

Only one response came which was unusual and that is the teacher gave books to parents too so that the child can learn at home.

#### 4.4.4 Sharing progress of students with parents

Seventy three per cent (73 per cent) teachers responded that they had shared the information about the child's progress with their parents. Only 33 per cent teachers had a written record of the same. Thirty nine per cent had not maintained any records and 28 per cent were not aware about maintaining the records.

In 41 per cent schools records were maintained of parent meetings held to share students' regular progress. In 56 per cent schools no such records were maintained. This information was elicited from the Head Master. It was found that during the visit in three per cent schools the Head master was absent.

Majority of the visits were made by the CRCC. Even then the percentage of visits are very low. Whereas the percentage of officials not having visited the remedial classes is very high. The data reveals that in 30 out of 115 schools the CRCC did not visit the Integrated Remedial classes. It reveals that 26 per cent of the schools could not receive any support from CRC Coordinator during last two and half months; i.e between December 2011 and

Table 9: Visits by Other Officials (in percentage)

Frequency of visit	CRCC	BRP	BRCC	Kelavni Nirikshak	DIET Vykhyata	SSA OIC
One	14	17	24	19	4	3
Two	17	13	7	4	1	1
3-5	33	5	3			
6-10	4					
11-15	3					
None	30	66	66	77	94	96



March 2012, the period of Integrated Remedial Program. It seems a very big gap in monitoring and handholding of teachers.

## 4.4.5 Examinations/ diagnostic test held

In 55 per cent of the classes exams were held to know students' performance in reading, writing and math. A large number 44 per cent did not hold any special exams for the same. Of the classes in which examinations were held i.e 56 per cent, in 65 per cent of the classes written records of students' results were maintained. In short, 82 (35 per cent) out of 230 classes have done the assessment and maintained essential record of the program. This also is an issue of monitoring of the program. The program was to be started with the baseline data and the teachers were supposed to take an examination/test for having better understanding regarding the needs of students. Here it is revealed that the diagnostic work was not done by 44 per cent of the teachers and around 65 per cent teachers did not maintain the record.

## 4.4.6 Teleconference on IRP

Seventy one per cent of the teachers had attended the special teleconference held for IR. Twenty seven per cent teachers did not attend whereas; three teachers (one per cent) responded that they did not know about it.

From the teleconferences the teachers responded that they learnt different methods of teaching (48 per cent), teacher child interaction (6 per cent), use of materials (17 per cent), and making new TLMs (one per cent).

One per cent teachers reflected that more demonstrations should be held for standard 5-8 and one per cent felt that more information on 'English' subject is required.

Twenty one per cent (21 per cent) teachers responded that they did not know anything about the content transacted through the

teleconferences whereas; twenty two per cent (22 per cent) responded that they did not learn anything.

Monitoring of training through teleconference also is an issue here. Around one fourth of the teachers did not attend the training through teleconference. More than 40 per cent of those who attended the teleconference could not understand content or could not learn anything. It should be noted here that programmes telecasted are high quality programme including demonstrations and sharing of experiences. Therefore, it reveals that good quality teleconference also is not considered seriously by many of the teachers.

## 4.4.7 Time schedule for IRP work

Thirty three per cent (33 per cent) teachers taught the students through the whole day together with their regular teaching whereas; a large majority, 75 per cent taught during specific time they had allotted during the whole day like beginning 45 minutes, recess, etc.

## 4.4.8 Opinion of teachers about IRP

Fifty six per cent teachers (56 per cent) opined that Integrated Remedial program was a good initiative. Time was mentioned as a constraint by 11 per cent teachers. They lacked enough time to teach the students. Therefore six per cent (6 per cent) of the teachers were of the opinion that a separate teacher should be appointed for this activity. Nine per cent (9 per cent) teachers felt that IRP was a disadvantage to the regular students. Teachers felt that parents of these students lack awareness (four per cent) and therefore creating awareness in parents for students' academic learning should also be emphasized. Teachers (four per cent) also opined that either grant should be provided in advance or materials should be provided instead of grant. Two per cent teachers felt that

teachers' capacities need to be built to transact such a program.

Two important points that emerged were;

- a) Students should be so well taught from the beginning that there would not be any need for IRP (one per cent)
- b) Students are very irregular which leads to poor learning and in turn poor performance (17 per cent)

### 4.4.9 Summary

The results reveal that the exercise of assessing students, and then providing inputs to students with low levels of learning is good. It helps in better learning for students. At the same time distribution and utilization of grants in time should be emphasized. The teleconferences are helpful to teachers in performing their role better. Teachers need to use more student friendly, development promoting methodology of teaching. Use of innovative teaching aids should be part of a regular classroom program.





# Recommendations



- The special grant provided by SSA for Integrated Remedial Programme should reach to the teachers in time. The SSA should specifically monitor the use of grant provided for the programme
- The material to be provided for the programme should also reach in time to the schools. Considerable numbers of schools did not receive Early Readers or Lekhan Sarjan workbooks even by the middle of the programme
- CRC Coordinators should visit and monitor the programme intensively. More than 30 per cent of the remedial class was not visited even once during two and half month of the programme. CRC Coordinators are required to visit 8 to 10 schools in a month even in regular time. When programmes like IRP are implemented, the monitoring should be more frequent and more intensive
- When the teachers are trained through teleconference, the state should monitor the training in the field so that all teachers attend the teleconference consciously.
- Specific time of the day should be defined for such program so that the other students in the class do not suffer because of students covered under IRP.



