Three Years of DPEP and Learners' Achievement

An Overview

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ज़िला प्राथमिक शिक्षा कार्यक्रम
DISTRICT PRIMARY EDUCATION PROGRAMME

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Foreword

The post-independence India has witnessed remarkable expansion in the area of elementary education. Enormous progress has been made in terms of increase in the number of institutions from 224 thousand schools in 1951 to 745 thousand schools in 1995. Not only this, the enrolment at the primary stage has also increased almost five fold from 19.2 million in 1951 to 109.1 million in 1995. Inspite of all these achievements the target of realising the Universalisation of Elementary Education (UEE) still remains an elusive goal. Realising the gravity of the problem, the National Policy on Education (NPE) -1986 and the subsequent Programme of Action (POA)-1992 accorded unqualified priority to universalization of elementary education.The policy shifted its emphasis from enrolment per se to retention and achievement as well. It is in this context that a centrally sponsored scheme of the District Primary Education Programme (DPEP) with external funding was formulated in 1993-94.

The DPEP parts company from stereotyped confines of thinking and emphasises on decentralized micro-level planning where districts, instead of the state, are to be considered the unit of planning for UEE. The DPEP is a home grown idea that intends to achieve the UEE in a contextual manner with emphasis on participation and capacity building. Following this spirit, 42 districts spread over seven states were identified for coverage under Phase-I of the programme in the year 1994. Since then, the number under this programme has risen to 149 districts spread over 14 states. Further, the expansion of the programme to cover 24 more districts in two states is on the anvil.

Prior to launching the programme, baseline assessment studies were conducted in all the project districts to generate the bench mark data on access, retention and achievement. This exercise was undertaken with a view to devising research-based local specific interventions to accelerate the pace of universalization of improved quality. Based on the findings of the baseline studies, necessary interventions were designed and implemented tailored to the requirement of the project districts. With a view to assessing the impact of these interventions on learners' achievement, an in-depth mid-term assessment survey was mounted during the middle of 1997. This exercise was undertaken to provide answers to questions like; "Is there any improvement in the achievement levels of learners?" "Are the inequities in achievement decreasing in regard to gender and social groups?" and "Are we moving in the right direction?" An attempt has been made through the present study to provide answers to all these questions.

The present report brought out by the National Council of Educational Research and Training (NCERT), New Delhi is based on the findings of the mid-term assessment studies conducted by individual phase-I states. This document provides an overview of the status of learners' achievement in language and mathematics at the end of the initial and the penultimate stages of primary schooling. Besides, it also makes an attempt to present a comparative assessment of learners' performance and gaps in achievement on the initial survey and the recent survey. The study throws light on various aspects pertaining to learners' achievement.

While it is our constant endeavour to strengthen the intervention strategies through research and intervention, I hope, this volume will be of interest to educational researchers and policy planners engaged in planning and management of primary education. The Department of Education would like to thank the NCERT authorities especially Prof. Ved Prakash and his team for bringing out this document in its present form.

(P.R.Dasgupta)

Acknowledgements

The District Primary Education Programme has been in the field for over three years. During this period a plethora of interventions have been put into practice for realising the objectives of the programme. In order to assess the impact of these interventions, different studies were commissioned at the instance of the DPEP Bureau, Department of Education, MHRD, New Delhi. Of them, one of the studies- the Mid-Term Assessment Survey (MAS) was conducted in all the DPEP Phase-I states to assess the performance of learners both in language and mathematics.

The members of the research team of the DPEP Core Resource Group at the NCERT, gratefully acknowledge the unstinted support extended by Shri R.S. Pandey, Joint Secretary DPEP Bureau, MHRD, New Delhi for executing the study. The research team has been immensely benefitted by the valuable suggestions offered by Shri R.S. Pandey from time to time.

The research team owes a lot to Professor A.K. Sharma, Director, NCERT and also to Professor A.N. Maheshwari, Joint Director, NCERT for evincing keen interest in the progress of the study and for providing guidance at every stage of the study. But for their constant endeavour and considered opinion, the study would not have taken its present shape.

The study draws heavily on the contributions of the State Project Directors, Director SCERTs and the Principal Investigators. Thanks are due to the members of the administrative staff of the DPEP Core Resource Group for their support in handling the text.

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Executive Summary

Universalisation of Elementary Education (UEE) has always been a matter of great concern for policy planners in India. While considerable progress has been made as a consequence of inputs provided under various schemes during the last five decades, the target of achieving the UEE has still remained a distant dream. The most significant reasons for the task remaining unfinished have been disregard to the element of contextuality and a misplaced emphasis on uniform prescription for bringing about qualitative improvement in primary education. Having realised these inadequacies and responding to the call for a higher intensity of effort and more systematic planning, the District Primary Education Programme (DPEP) was launched in the year 1994 in 42 districts spread over seven states under Phase-I.

Before anchoring the DPEP in Phase-I states, the baseline assessment studies were conducted in all project districts. One such study was undertaken in the year 1994 to ascertaining the existing level of students' achievement in language and mathematics at the end of class-I and at the end of the penultimate class. The findings of the study known as Baseline Assessment Study (BAS) were used to planning local specific interventions for accelerating the pace of universalization of improved quality in the area of primary education.

In order to assess the level of success of three years of DPEP interventions, a subsequent study in the name of Mid-Term Assessment Survey (MAS) was mounted in the year 1997 in all the forty two districts of the Phase-I states. This study aimed at measuring the average performance of students' achievement on the newly developed competency based achievement tests in language and mathematics at the end of class-I and at the end of the penultimate class of primary schooling. The study was also an attempt to compare the average performance of students' achievement on the BAS tests administered during the initial survey in the year 1994 with that of students' performance on the same test readministered in the year 1997. In addition, the study also compared the inequities in achievement in regard to gender and social groups obtained separately under BAS-1994 and MAS-1997. The entire exercise of the MAS was undertaken not only to assessing students' performance on MAS and making comparisons between BAS-1994 and BAS-1997 but also to identifying the inadequacies so as to provide pointers for planning mid-course corrections.

A multistage stratified random sampling technique was employed for the conduct of the MAS. Incidentally, the tests employed under MAS-1997 developed by the Ed.CIL were different from those used under BAS-1994. The MAS was conducted by the states with the support of the NCERT. In the capacity of the nodal agency, the NCERT developed the design, instruments, framework of data analysis and other complementary materials for administration during the conduct of MAS. It also carried out the task of training the Master Trainers at the state level and closely monitoring the progress of the study.

Keeping in view the objectives of the study, the MAS tests were administered for the purposes of assessing the average performance of students and also for finding achievement gaps between gender and social groups in the present context. However, for measuring the hike in students' achievement after a period of three years of DPEP interventions, the BAS tests used during 1994 were readministered to the students of five schools that were randomly selected from the sample of MAS-1997.

It may be pertinent to mention here that the present study provides an overview of the findings gathered from the data of five out of seven DPEP Phase-I states.

The average performance of class-I students on MAS conforms to the inherent element of contextuality of the primary school system prevailing in the country, since the

range varies within and across the states. The data also reveal that all the project districts have crossed the fifty percent mark in students' achievement both in language and mathematics. There are also some districts which have displayed outstanding performance with a peak of eighty percent. In each state except Haryana there is one district which has demonstrated excellent performance in both the subjects. Besides, identical pattern of growth and sequence in both subjects have been recorded in all the districts across the states.

The analysis of students' achievement in classes III/IV also confirms the element of contextuality. The data reveal that the average performance of these students varies from a low of twenty three percent to a high of sixty one percent in mathematics and from a low of thirty three percent to a high of sixty percent in language. Of all the states, only the states of Haryana and Karnataka, have shown an identical pattern of growth and sequence in both the subjects.

The comparisons between the students' performance of class-I on BAS-1997 with that of BAS-1994 have revealed a hike both in language and mathematics in three out of five states. In Maharashtra and Kerala, however, a decline was discernible in some of the districts. The pattern of gains in achievement and its sequence in both subjects have been visible in the states of Haryana and Karnataka.

A comparative assessment of students' achievement of classes III/IV in BAS-1997 with that of BAS-1994 has demonstrated that the states of Tamil Nadu and Karnataka have recorded a hike in both the subjects. Exception to this has been observed in the remaining three states wherein the performance has shown a decline in some of the districts. In the state of Karnataka, the hike in achievement is more pronounced in language than in mathematics.

The near absence of gender based inequities amongst the students of class I is a very encouraging sign. The achievement gaps between boys and girls of class-I on MAS have fallen below the five percent mark in language in all the states and in mathematics in four out of five states. In certain cases the gaps in achievement favour the girl students. The areawise achievement gaps on MAS have achieved the target of less than five percent only in half of the districts across the states. Similarly, the categorywise achievement gaps on MAS have also dipped below the five percent mark in eleven districts in language and in thirteen districts in mathematics.

Genderwise achievement gaps in classes III/IV on MAS have fallen below the five percent mark in both the subjects in all the districts with the exception of two districts in mathematics in Maharashtra. The areawise achievement gaps have dropped below the five percent mark only in some of the districts. Contrary to the areawise gaps, the categorywise achievement gaps have fallen below the five percent mark in almost all the districts in both the subjects across the five DPEP states. In one of the states, the existing categorywise achievement gaps have shown to favour SC/ST students in a large number of cases.

The average performance of students of Class-I on MAS has been relatively better than that of classes III/IV. But still there is room for improvement in the performance of Class-I students in some of the districts. Low levels of average performance in classes III/IV show the immensity of the unfinished task. It seems that the pedagogical renewal processes have not yielded desirable results in classes III/IV as much as in class-I. Hence greater emphasis needs to be laid for realising the desired results in classes III/IV and in certain pockets in class-I.

When comparisons are made between BAS-1994 and BAS-1997, remarkable performance is witnessed in some of the districts. In pockets where the goal of twenty five percent hike in learners' acheivement has already been attained, continued efforts are required to maintain the tempo and boost this level to the mastery level of one hundred percent. For those districts where the achievement level is dithering under twenty five percent, concerted efforts are required to raise it to the desired level.

In so far as the achievement gaps in gender are concerned, they have been observed to lie under the five percent mark. However, the same is not true in respect of area and category, for the gaps in these sections have been witnessed beyond the five percent mark in quite a large number of cases. Focussed attention is, therefore, required to bridge the gaps in achievement in area and category wherever existing.

CHAPTER 1

Introduction

Historical Perspective

The District Primary Education Programme (DPEP) guidelines were formulated in April, 1993 and the programme evolved in January, 1994 as a centrally sponsored scheme seeking to operationalise the NPE-POA strategies of achieving the Universalization of Elementary Education (UEE) by transforming, toning and accelerating the primary education system. The DPEP is a home grown idea that intends to achieve the UEE in a contextual manner with emphasis on participation and capacity building.

The DPEP aims at developing a replicable, sustainable and cost effective programme with the objective:

- to reduce differences in enrolment, dropout and learning achievement among gender and social groups to less than five percent.
- to reduce overall primary dropout rate for all students to less than ten percent
- to increase average primary learning achievement by at least twenty five percent over measured baseline level by ensuring achievement of basic literacy and numeracy competencies and a minimum of forty percent achievement levels in other competencies by all primary school children.
- to provide, according to national norms, access to all children to primary schooling wherever possible or its equivalent non-formal education
- to strengthen the capacity of national, state and district institutions and organisations for the planning, management and evaluation of primary education.

The DPEP is an exciting idea not only because of its super goals but also because of its focus on contextuality, its emphasis on capacity building, participative planning and management approach and its intensity to address issues pertaining to access, participation and achievement.

Since the DPEP is a district specific programme, districts were identified using the twin criteria namely i) educationally backward districts with female literacy below the national average, and ii) districts where the total literacy campaigns have been successful leading to enhanced demand for elementary education.

Following the above mentioned criteria, forty two districts spread over seven states were identified for inclusion in phase-I of the programme. The names of the states and the districts covered under phase-I are listed in the following table.

S.No	State	No. of Districts	Names of the Districts
1	Assam	4	Darrang, Dhubri, Karbi-Anglong, Morigaon
2	Haryana	4	Hissar, Jind, Kaithal, Sirsa
3	Karnataka	4	Belgaum, Kolar, Mandya, Raichur
4	Kerala	3	Malappuram, Kasargode, Wayanad
5	Madhya Pradesh	19	Satna, Rewa, Sidhi, Tikamgarh, Chhattarpur, Panna, Bilaspur, Raigarh, Rajanandgaon, Sarguja, Shahdol, Betul, Dhar, Mandsaur, Guna, Rajgarh, Raisen, Ratlam, Sehore
6	Maharashtra	5	Aurangabad, Nanded, Parbhani, Latur, Osmanabad
7	Tamil Nadu	3	*South-Arcot, Thiruvannamalai, Dharmapuri

* The district has now been bifurcated into two districts namely Cuddalore and Villupuram.

Baseline Studies for Research Based Interventions

Prior to anchoring the programme, various Baseline Studies were conducted in all the project districts with a view to establishing the benchmark and for planning research based interventions. Of them, one study was devoted to assessing the students' achievement in the foundation subjects namely language and mathematics. These studies under the banner of Baseline Assessment Studies (BAS) were levelled at the students at the end of the initial year and at the end of the penultimate stage of primary schooling. These baseline assessment studies conducted as a part of the planning process have been a path breaker since achievement levels of over sixty thousand students were tested against a rigorous sampling design with the aim to identifying area- specific interventions in each project districts. The data generated through these studies were analysed, interpreted and compiled in the form of study reports for individual states. These study reports were utilized for devising DPEP interventions for the purposes of improving learners' performance over the measured baseline data. Subsequently, a number of interventions were planned based on the findings of the baseline assessment studies so as to realise the objectives of the DPEP in particular and to improve the system of primary education in general.

Mid-Term Assessment Survey

The programme has arrived at mid-way in its journey of implementation since 1994. After a gap of three years, the Mid-Term Assessment Survey (MAS) was mounted in the year 1997 in all the project districts of the DPEP-Phase-I states. This step was taken in consonance with the stipulation of the World Bank Report No. 13072-IN, page-42, para 3.23.(a) "ensure that assessment studies are carried out in all project districts in the third and the sixth year of the project using methods satisfactory to IDA."

This exercise would enable the policy planners to take a relook at the strategies to ensure that they are moving in the right direction for realising the goals of the DPEP Besides, the MAS would also aid in applying mid-course corrections, assessing the quantum of activities carried out in different operational areas, highlighting areas which require additional inputs and identifying pockets hitherto unknown and unexplored which require special treatment.

The mid-Term Assessment Survey (MAS) has been initiated with the following objectives in focus:

To measure the average performance of students' achievement on the newly generated competency based achievement tests in language and mathematics at the end of Class-I and at the end of the

penultimate class of primary schooling under MAS, 1997.

To compare the average performance of students' achievement on the BAS tests administered during the initial survey in the year 1994 with that of students' performance on the same tests readministered in the year 1997.

To compare the achievement gaps in regard to gender and social groups obtained separately under BAS-1994 and MAS-1997.

In addition to these three objectives, the mid-term assessment survey also aimed at studying the influence of various variables on students' achievement besides identifying the adequacies and inadequacies of the programme. However, the present document delimits itself only to the aforementioned three objectives.

Design of the Survey

Normative correlational survey design was employed for conducting the Mid-Term Assessment Survey.

Population: The mid-term assessment survey was targeted to cover the 42 districts of the DPEP Phase-I states. The states are Assam, Haryana, Karnataka, Kerala, Madhya Pradesh, Maharashtra and Tamil Nadu.

Time: As per the decision of the Advisory Committee, the MAS was conducted in the aforesaid states at the commencement of the academic session except in the state of Assam where the MAS was conducted four weeks prior to the closing of the academic session.

Tools: Following tools were employed for conducting the mid-term survey:

1. Achievement tests both in literacy and numeracy for class I students
2. Achievement tests both in language and mathematics for Classes III/IV students.
3. School Record Schedule
4. Teachers' Schedule
5. Student Present Schedule
6. Student Dropout Schedule including Achievement Test
7. Field Notes
8. Training Manual
9. Field Handbook

Sampling Design

Multistage stratified random sampling technique was employed for the selection of various constituents of the MAS.

Target Population: The target population used in the MAS is given as under:
Schools: All Govt. and Govt. Aided Primary Schools including primary sections (I-IV/V) attached to upper primary/secondary/senior secondary schools.
Teachers: All teachers including the Head teacher.
Students: i) All students at the end of the initial stage of primary schooling, ii) All students at the end of the penultimate stage of primary schooling (III/IV)

Various steps involved in the selection of total number of schools, selection of number of urban and rural schools, selection of blocks, selection of urban areas, selection of schools from rural and urban areas , selection of students and teachers are given as under:

Step-I

Total number of schools selected for the survey

10% of the total number of government and government aided primary schools including primary sections attached to upper primary/secondary/senior secondary schools having classes I to IV/V were selected in each project district, subject to a maximum of 50 schools.

Step-II

No. of Schools selected from the Urban and Rural Sectors

The schools decided for the survey under step-I were divided proportionately on the basis of the total number of urban and rural schools in the district, subject to a minimum of 10 schools from the urban area.

Step-III

Selection of Blocks

While selecting the blocks, the urban areas if any, were excluded from the blocks. All blocks were selected, if the total number of blocks was upto 4. If the total number of blocks was more than four, two separate lists of tribal and non-tribal blocks (arranged alphabetically) were prepared. Subsequently, from these two lists, four blocks were selected proportionately and randomly with a minimum of one block from the tribal list.

Selection of Urban Areas

Prior to selecting the urban areas, all the urban areas were arranged alphabetically. All the urban areas were selected if the total number of urban areas was upto 3. If the number of urban areas was more than 3 then only 3 areas were randomly selected.

Step-IV

Selection of Schools

Rural Schools

Schools were proportionately selected from each sampled block using the table of random numbers after preparing a list of government and government aided schools.

Urban Schools

Schools were proportionately selected from each sampled urban area using the table of random numbers after preparing a list of government and government aided schools.

Besides, a replacement list of 10 schools in the proportion of rural and urban number of sampled schools was also prepared for meeting out any exigencies.

Step-V

Selection of Students

Class-I

One section was randomly selected wherever the number of sections was more than one. All the students of this section were selected if the number of students was 20 or less than 20. If the number of students was more than 20, the boys and girls were alternately arranged using the class register and then 20 students were finally selected using random start.

Classes III/IV

One section was randomly selected wherever the number of section was more than one. All the students of this section were selected if the number of students was 30 or less than 30. In those cases where the number of students was more than 30, the boys and girls were alternately arranged using the class register and then 30 students were finally selected using random start.

Step-VI

Selection of Teachers

Five teachers including the Head Master/Head Teacher were selected for the study. Of them, one was the head teacher. The second teacher was the one who taught the sampled students of class I. Third teacher was the one who taught the sampled students of Classes III/IV. If there were separate teachers teaching language and mathematics to the students then both were included in the sample and the fifth teacher was randomly selected from amongst the remaining teachers. In those schools where the language and the mathematics teacher happens to be the same person both the fourth and fifth teachers were randomly selected from amongst the remaining teachers.

Overview of the Tests Used in BAS & MAS

It may be pertinent to mention here that the tests employed under MAS-1997 were different from those used under BAS-1994 and that these new tests employed under MAS were developed by the Ed.CIL. A broad classwise outline of the tests used under both the BAS and the MAS is given as under and their analyses are provided in Annexure-A.

Class-I Language Tests BAS & MAS

The test in language used under BAS comprised a set of twenty items. Of them the first set of ten items were devoted to the recognition of alphabet and the second set of ten items to recognition of words. Out of these ten words only one word involved the recognition of more than one 'Matra'. The test required the reading of the alphabet and the words.

The MAS test in language also contained twenty items,

but all these items were devoted only to the recognition of words. Out of these twenty words, there were as many as ten words having more than one 'Matra'. The test warranted the recognition of the picture and reading of a set of four given words and recognising the word that would associate with the picture.

Class-I Mathematics Tests BAS & MAS

The mathematics test under BAS consisted of fourteen items based on four competencies. The mode of its conduct was individual administration where the examinee indicated the answer.

The MAS test in mathematics contained twenty items which measured as many as ten competencies inclusive of the four competencies that were covered under BAS test. The mode of its conduct was also individual administration both oral and written.

Class III Language Tests BAS & MAS

The language test under BAS had forty four items divided into part one and part two. Under part one there were twenty items of word knowledge while in part two, there were twenty four items on reading comprehension. It was a group test.

The test under MAS covered sixty five items in language divided into two parts namely part one and part two. Part one had thirty items under word knowledge and part two had thirty five items under reading comprehension.

It may be mentioned here that the words and the passages used under BAS & MAS tests were different.

Class III Mathematics Tests BAS & MAS

The BAS test in mathematics consisted of forty items measuring thirty four competencies while the MAS test with equal number of items measured only thirty competencies. In the MAS test, of the thirty competencies, there were thirteen competencies that were common with the BAS test and the rest were different. The MAS test had items based on four digit numbers.

Class -IV Language Tests BAS & MAS

The language test under BAS comprised eighty four items broken down into part one and part two. Part one had forty items on word knowledge while part two had forty four items on reading comprehension.

The MAS test had seventy items split into part one and part two. Part one had thirty five items under word knowledge and part two had thirty five items under reading comprehension. The MAS test had a different set of words and comprehension passages from that of the BAS tests.

Class IV Mathematics Tests BAS & MAS

The mathematics test under BAS had forty items measuring twenty six competencies. The MAS test also had forty items but measuring only twenty five competencies. In the newly constructed MAS test, eighteen competencies were common with the BAS test and the rest were different.

Strategy for the conduct of MAS

The conduct of the MAS was a shared responsibility between the NCERT and the state. The NCERT in its role of the nodal agency developed the design, instruments, framework of data analysis and other complementary materials. Besides, the NCERT conducted the training of the Master Trainers and extended academic assistance to the states on demand. All the documents employed in the conduct of the MAS except the achievement tests were developed by the NCERT and presented for clearance before the National Advisory Committee on Surveys constituted by the Department of Education, Govt. of India.

Test Administration

As mentioned earlier a set of newly generated competency based achievement tests was employed for assessing students' performance under the MAS. Since these tests were different from the earlier tests used in the initial survey (BAS), they were used only for assessing the average performance of students and also for finding achievement gaps between gender and social groups in the present context in all schools sampled under MAS. However, in order to ascertaining the hike in students' performance after a period of three year of DPEP interventions - the same set of tests that were used during the initial survey in the year

1994 was readministered to the students of five randomly selected schools out of the total number of sampled schools in each project district. The initial tests were administered to the same set of students of the five selected schools who had already attempted new tests under MAS.

Data Analysis

A document titled Framework of Analysis of the Data of Assessment Surveys was developed by the DPEP Core Resource Group of the NCERT and conveyed to all the states. This document provides guidelines for handling of the data, data analysis, format of tables, supported by the sources of data comprising the corresponding item number and name of the schedule. Besides, it also provides the scheme of chapterization for report writing. This strategy was adopted for the purposes of ensuring both uniformity and compatibility in the production of study reports across the states.

The entire analysis plan centres around finding out the current status of students' achievement in relation to DPEP objectives, the influence of the DPEP interventions and the comparisons of BAS 1994 results with that of the results obtained on the same test readministered in the year 1997. The plan also assesses the average performance of students obtained on newly generated achievement tests administered under MAS in the year 1997 and the achievement gaps in regard to gender and social groups thereof.

The present document is based on the findings available from 5 out of the 7 DPEP states. They are the states of Tamil Nadu, Karnataka, Haryana, Maharashtra and Kerala.

CHAPTER 2

Assessment of Students' Achievement on MAS

This chapter provides for the average performance of students' achievement on the newly generated competency based tests in language and mathematics in classes I and III/IV under the Mid-Term Assessment Survey, 1997.

2.1 Average Learning Achievement in Class-I

The average learning achievement exhibited by class-I students both in language and mathematics in five DPEP Phase-I states is dealt with in the subsequent paragraphs.

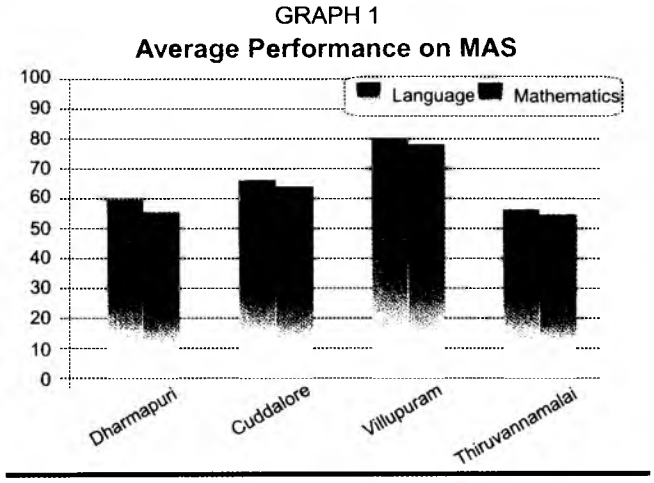
2.1.1. Tamil Nadu

The following table presents the performance of class I students that they have demonstrated during MAS-1997.

Table 2.1.1. : Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Dharampuri	874	58.81	53.11
2	Cuddalore	840	66.49	62.50
3	Villupuram	915	79.40	77.60
4	Thiruvanna-malai	832	56.34	52.27

GRAPH 1



The figures shown in Table 2.1.1 indicate that all the four districts have crossed the fifty percent mark in achievement both in language and mathematics and in one district it has even crossed the seventy five percent mark in both the subjects.

In language, Villupuram has touched a high of 79.40% followed by Cuddalore at 66.49%, Dharampuri at 58.81% and Thiruvannamalai at 56.34%. In Mathematics, it is again Villupuram which has registered an achievement of 77.60% followed

by Cuddalore at 62.50%, Dharmapuri at 53.11% and Thiruvannamalai at 52.27%.

It is interesting to note that the trend in achievement in language follows an identical pattern of growth and sequence in the subject of mathematics. Of all the districts, Villupuram has taken a lead in both the subjects.

- Students' achievement crosses the fifty percent mark in both subjects.
- Identical pattern of growth & sequence in students' achievement in all the districts.
- Villupuram takes the lead.

2.1.2. Karnataka

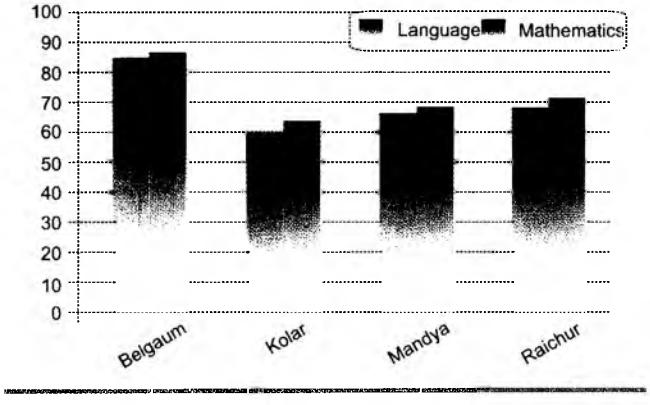
The table below displays the performance of Class-I. Students exhibited during MAS-1997.

Table 2.1.2: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Belgaum	593	83.90	86.95
2	Kolar	488	59.95	63.35
3	Mandya	596	65.59	68.45
4	Raichur	708	67.50	71.35

GRAPH 2

Average Performance on MAS



The data in Table 2.1.2 reveal that all the districts in Karnataka have almost crossed the sixty percent mark in achievement both in language and mathematics and in one district it has even surged ahead to crossing the eighty four percent mark.

In language, it is Belgaum which has risen to 83.90% followed by Raichur at 67.50%, Mandya at 65.59% and Kolar at 59.95%. In mathematics, it is again Belgaum which has risen steadily to 86.95% followed by Raichur at 71.35%, Mandya at 68.45% and Kolar at 63.35%.

Incidentally, like in Tamil Nadu, the pattern and sequence of growth in both the subjects in all the districts is identical. It is the district of Belgaum which has captured the leading position in both subjects.

- Sixty percent mark crossed by all the districts in both subjects
- Similar growth pattern in achievement observed in all districts
- Belgaum captures the ace position

2.1.3. Haryana

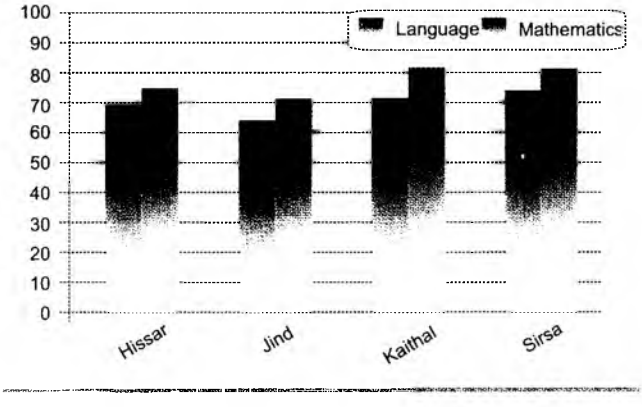
The undermentioned table depicts the performance of class-I students displayed during MAS-1997.

Table 2.1.3: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Hissar	857	69.73	74.13
2	Jind	919	63.28	70.90
3	Kaithal	726	71.47	81.03
4	Sirsa	938	73.75	80.58

GRAPH 3

Average Performance on MAS



The figures shown in Table 2.1.3 indicate that all the four districts in the state of Haryana have crossed the sixty three percent mark in students' achievement in both the subjects and in two districts in mathematics it has even crossed the eighty percent mark.

In language, Sirsa has recorded a high of 73.75% followed by Kaithal at 71.47%, Hissar at 69.73% and Jind at 63.28%. In mathematics, Kaithal has edged up to 81.03% followed by Sirsa at 80.58%, Hissar at 74.13% and Jind at 70.90%.

The remarkable feature in Haryana is that all the districts in mathematics have displayed outstanding results as they have scored above 71% mark. Of all the districts, Sirsa takes a lead in language while the top position in mathematics is shared by the duo of Kaithal and Sirsa.

- Achievement in both subjects crosses the sixty three percent mark.
- Outstanding performance displayed in mathematics
- Sirsa and Kaithal render superior performance

2.1.4. Maharashtra

The following table portrays the performance of class-I students displayed during MAS-1997.

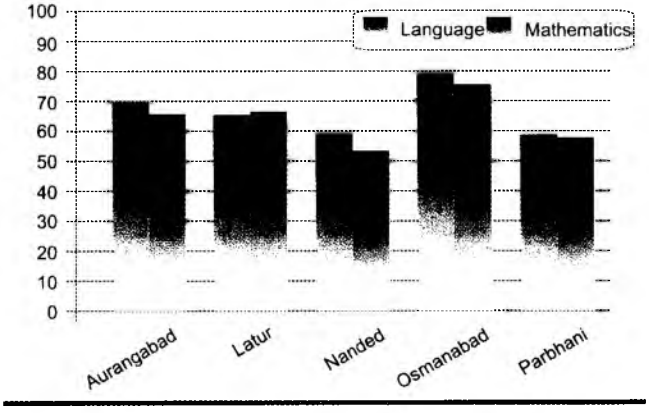
Table 2.1.4: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Aurangabad	845	69.55	66.10
2	Latur	864	65.65	66.35
3	Nanded	762	59.10	52.20
4	Osmanabad	830	79.00	75.10
5	Parbhani	864	58.65	57.90

The entries in Table 2.1.4 indicate that the students' achievement has crossed the fifty eight percent mark in language and fifty two percent mark in mathematics. The highest achievement recorded is 79% in language and 75.1% in mathematics.

GRAPH 4

Average Performance on MAS



In language, Osmanabad has registered a high of 79% followed by Aurangabad at 69.55%, Latur at 65.65%, Nanded at 59.10% and Parbhani at 58.65%. In mathematics, it is again Osmanabad which has touched 75.10% followed by Latur at 66.35%, Aurangabad at 66.10%, Parbhani at 57.90% and Nanded at 52.20%.

It is evident from the above discussion that Osmanabad has taken a lead in both the subjects.

- Students' achievement crosses 58% in language and 52% in mathematics
- Osmanabad displays an outstanding performance in both the subjects

2.1.5. Kerala

The subsequent table depicts the performance of class I students' achievement demonstrated during MAS-1997.

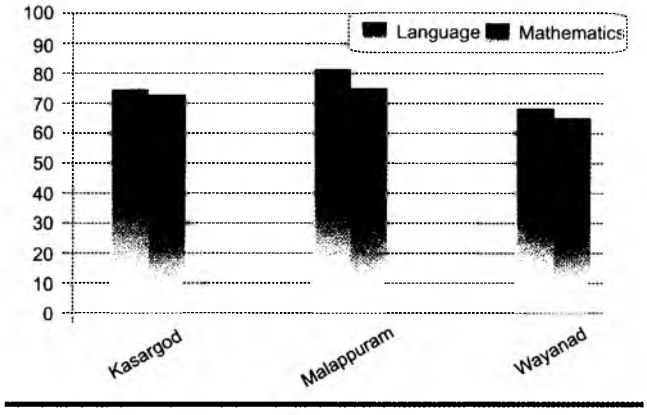
Table 2.1.5: Average performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Kasargod	907	75.30	73.60
2	Malappuram	985	81.45	76.10
3	Wayanad	555	69.30	66.10

The data shown in Table 2.1.5 reveal that all the three districts in the state of Kerala have crossed the 66%

GRAPH 5

Average Performance on MAS



mark in both the subjects and in one district it has even touched the 81% mark in language and 76% mark in mathematics.

In language, it is Malappuram which has recorded a high of 81.45% followed by Kasargod at 75.30% and Waynad at 69.30%. In mathematics it is again Malappuram which has netted an achievement of 76.10% followed by Kasargod at 73.60% and Waynad at 66.10%.

In the state of Kerala, there is an evidence of a pattern of growth and sequence in students' achievement in both the subjects across the state. Of all the districts, Malappuram has established a record in language and mathematics.

- Achievement touches the 66% mark
- Pattern observed in growth and sequence across the state
- Malappuram gives a head start in performance

2.1.6 Summing Up

The data shown in the preceding tables reflect that students' achievement not only varies from state to state but also varies from district to district. This feature conforms to the contextuality that is inherent in our primary school system. The range of average performance of students varies from a low of 52% to a high of 87%. Besides, there are a large number of examples of identical pattern of growth and sequence that are observed in students' achievement in both the subjects across the states. The data in the aforementioned tables also reveal that in each state there is a district which has consistently displayed excellent performance and hence retained the top position in both the subjects. This may be attributed to the balanced focus of interventions on both subjects to elicit goal oriented results.

2.2. Average Learning Achievement in Classes III/IV

The average learning achievement demonstrated by classes III/IV students both in language and mathematics in five DPEP Phase-I states is discussed in the following paragraphs.

2.2.1. Tamil Nadu

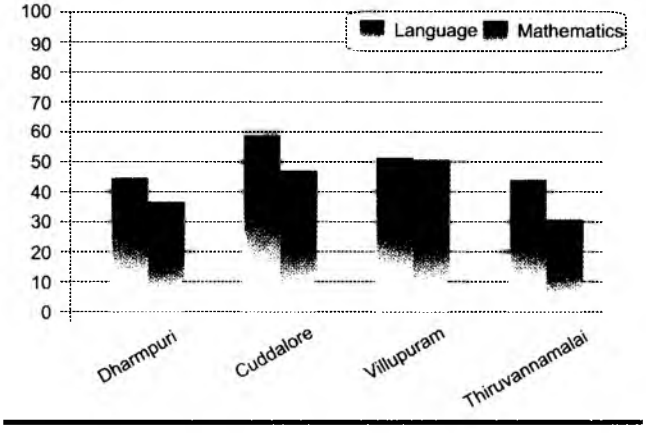
The following table illustrates the performance of class IV students exhibited during MAS-1997.

Table 2.2.1: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Dharmapuri	1030	44.17	37.78
2	Cuddalore	957	59.77	47.55
3	Villupuram	1102	51.25	50.98
4	Thiruvannamalai	921	43.63	30.94

GRAPH 6

Average Performance on MAS



The figures in Table 2.2.1 indicate that the students' performance has almost crossed the thirty one percent mark in both the subjects and in one district in

language it has even touched the sixty percent mark.

In language, Cuddalore has registered a high of 59.77% followed by Villupuram at 51.25%, Dharmapuri at 44.17% and Thiruvannamalai at 43.63%. In mathematics, it is Villupuram which has touched a high of 50.98% followed by Cuddalore at 47.55%, Dharmapuri at 37.78% and Thiruvannamalai at 30.94%. The top position has been bagged by Cuddalore in language and Villupuram in mathematics.

- Superior performance in language as against mathematics.
- Cuddalore & Villupuram share the top position in language and mathematics respectively

2.2.2. Karnataka

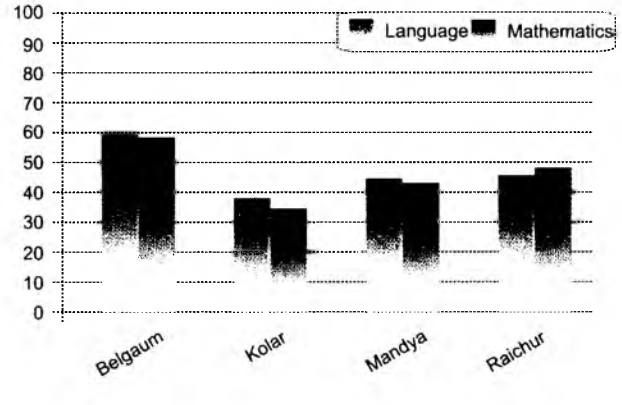
The undermentioned table portrays the performance of Class III students demonstrated during MAS-1997.

Table2.2.2: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Belgaum	937	59.34	58.70
2	Kolar	763	38.26	34.28
3	Mandya	913	43.52	42.55
4	Raichur	857	46.88	48.08

GRAPH 7

Average Performance on MAS



The entries shown in Table 2.2.2 indicate that all the districts in Karnataka have crossed the thirty eight percent mark in language and thirty four percent mark in mathematics.

In language, Belgaum has recorded a high of 59.34% followed by Raichur at 46.88%, Mandya at 43.52% and Kolar at 38.26%. Belgaum has given a repeat performance in mathematics by pegging 58.70% followed by Raichur at 48.08%, Mandya at 42.55% and Kolar at 34.28%.

An identical pattern is evinced in the growth and sequence of students' achievement both in language and mathematics across the districts. Of all the districts, Belgaum has captured the top position in both the subjects.

- Students' achievement crosses 38 % in language and 34 % in mathematics.
- Evidence of an identical pattern in the growth and sequences of students' achievement
- Belgaum comes through as a top performer

2.2.3 Haryana

The table below illustrates the performance of class IV students exhibited under MAS-1997.

Table 2.2.3: Average Performance on MAS

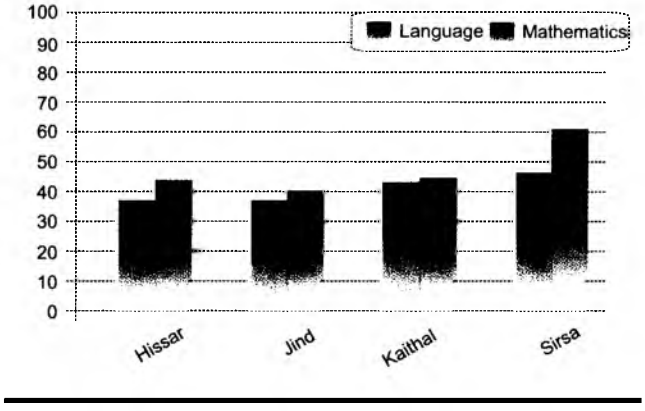
S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Hissar	996	38.73	43.25
2	Jind	1020	37.99	40.06
3	Kaithal	891	42.68	44.97
4	Sirsa	1027	47.02	61.26

The figures shown in Table 2.2.3 reveal that in the state of Haryana, the students' achievement has crossed the thirty eight percent mark in language and forty percent mark in mathematics in all the districts.

In language, Sirsa has exhibited a high of 47.02% followed by Kaithal at 42.68%, Hissar at 38.73% and Jind at 37.99%. Sirsa has again laid a claim to the top position in mathematics by touching a high of 61.26% followed by Kaithal at 44.97%, Hissar at 43.25% and Jind at 40.06%.

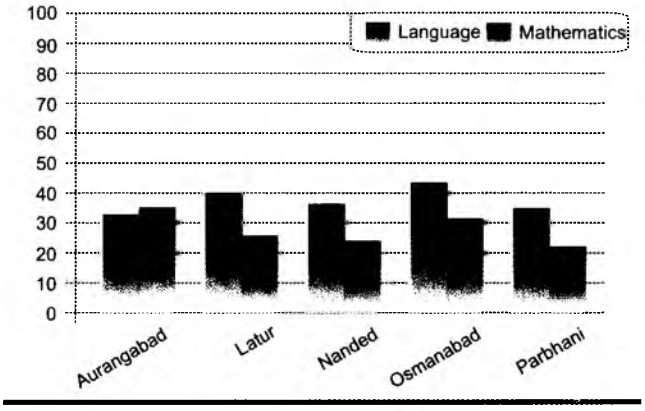
GRAPH 8

Average Performance on MAS



GRAPH 9

Average Performance on MAS



The data also reveal the emergence of an identical pattern of growth and sequence in students' achievement in the districts across the state. Another noticeable feature is that of all the districts, Sirsa has claimed the top position both in language and mathematics.

- Achievement crosses 38 % mark in language and 40 % mark in mathematics.
- Emergence of an identical pattern of growth and sequence observed in achievement.
- Sirsa tops the list.

2.2.4. Maharashtra

The undermentioned table portrays the performance of class III students demonstrated under MAS- 1997.

Table 2.2.4: Average Performance on MAS

S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Aurangabad	1120	33.31	36.55
2	Latur	1117	40.29	26.95
3	Nanded	996	37.32	24.88
4	Osmanabad	1091	43.91	31.88
5	Parbhani	1029	36.17	23.33

The entries in Table 2.2.4 explain that the students' achievement has crossed the thirty three percent mark in language and twenty three percent mark in mathematics across the state.

In language Osmanabad has captured the top position by securing 43.91% followed by Latur at 40.29%, Nanded at 37.32%, Parbhani at 36.17% and Aurangabad at 33.31%. The top position in mathematics has gone to Aurangabad which has scored 36.55% followed by Osmanabad at 31.88%, Latur at 26.95%, Nanded at 24.88% and lastly by Parbhani at 23.33%. It is the district of Osmanabad that has captured the top position in language and Aurangabad in mathematics.

- Achievement crosses 33 % mark in language and 23 % mark in mathematics.
- Top position shared by Osmanabad in language and Aurangabad in mathematics.

2.2.5. Kerala

The undermentioned Table presents the performance of class III students exhibited during MAS-1997.

Table 2.2.5: Average Performance on MAS

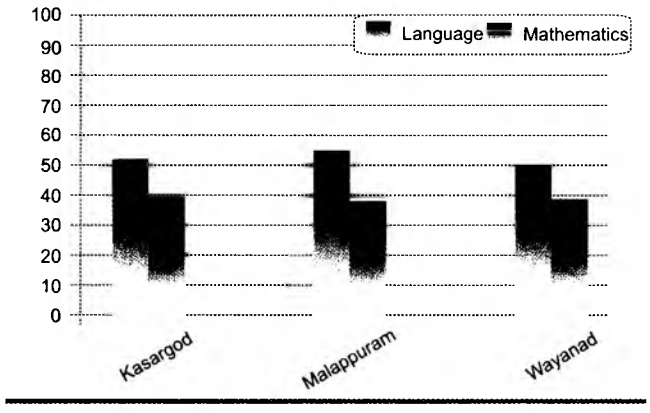
S. No	Districts	N	Mean Percent of students' Performance	
			Language	Mathematics
1	Kasargod	1254	51.29	38.83
2	Malappuram	1371	53.38	37.03
3	Wayanad	788	49.97	37.10

The figures shown in Table 2.2.5 reveal that the students' achievement has almost crossed the fifty percent mark in language and thirty seven percent mark in mathematics.

In language, Malappuram distinguishes itself by se-

GRAPH 10

Average Performance on MAS



curing a high of 53.38% followed by Kasargod at 51.29% and Waynad at 49.97%.

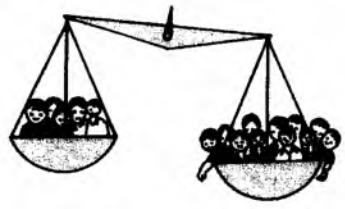
In mathematics, it is Kasargod that has laid its claim to the top position by securing 38.83% followed by Waynad at 37.10% and Malappuram at 37.03%. It is evident from the data that Malappuram in language and Kasargod in mathematics have secured the top positions.

- Students' achievement crosses 50% mark in language and 37% mark in mathematics
- Malappuram tops in language and Kasargod in mathematics.

2.2.6. Summing Up

The data portrayed in the preceding tables from 2.2.1 to 2.2.5 indicate district variations in students' achievement not only from state to state but also from district to district. This substantiates the contextuality present in our primary school system. The range of average performance of students varies from a low of 23% to a high of 61%. In the states of Haryana and Karnataka there are instances of the emergence of identical pattern of growth and sequence in students' achievement in both the subjects. The data also reveal that in these two states the district which has displayed an outstanding performance in one subject has retained its position in the other subject too.

It is pertinent to mention here that the performance displayed by classes III/IV students is not as spectacular as the one demonstrated by class I students under MAS. This may be attributed to the fact that the pedagogical renewal processes have not produced the same results at the penultimate stage as they have displayed at the end of the initial stage of primary schooling.



CHAPTER 3

A Comparative Profile of Students' Achievement on BAS Tests 1994 vs 1997

This chapter reflects the comparative status of students' achievement on the BAS tests administered during the initial survey in the year 1994 with that of students' achievement on the same set of tests readministered in the year 1997. The exercise of comparing the results may throw some light on the role of the DPEP interventions anchored during the last three years.

3.1. Comparisons Between BAS 1997 and 1994 in Class -I

The comparisons made between the average performance of students' achievement on BAS tests conducted in the year 1997 with that of the BAS tests held in the year 1994 in language and mathematics are discussed in the following paragraphs.

3.1.1. Tamil Nadu

The following table presents the average performance of class-I students exhibited during 1997 and 1994.

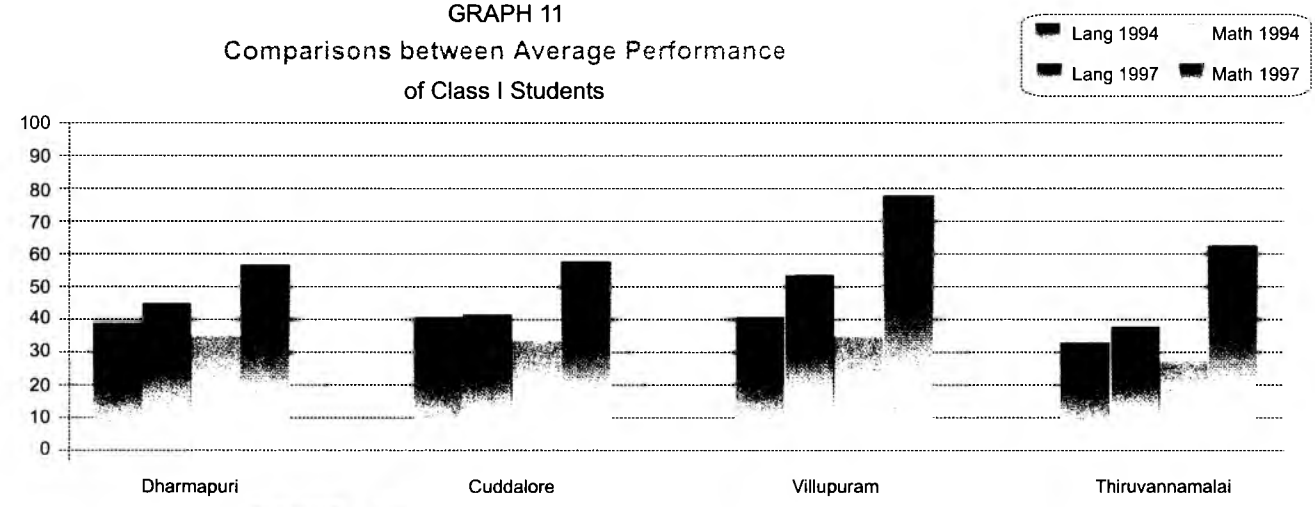
The entries in Table 3.1.1 reveal that all the four districts in the state of Tamil Nadu have registered a hike in achievement both in language and mathematics. In language the hike in achievement has risen by 0.70% in Cuddalore and by 12.50% in Villupuram. In mathematics, the hike has soared spectacularly by 21.64% in Dharmapuri and by as high as 43.62% in Villupuram. In fact in both subjects it is Villupuram which takes the lead followed by Thiruvannamalai.

Table 3.1.1: Comparisons between Average Performance of Class I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Dharmapuri	100	44.70	574	39.55	5.15	100	56.93	574	35.29	21.64
2.	Cuddalore	95	40.95	740	40.25	0.70	95	57.59	740	34.79	22.80
3.	Villupuram	91	52.75	-	40.25	12.50	91	78.41	-	34.79	43.62
4.	Thiruvannamalai	83	38.61	542	32.45	6.16	83	62.39	542	30.64	31.75

GRAPH 11

Comparisons between Average Performance of Class I Students



- All districts record a simultaneous hike in both subjects.
- Spectacular hike in mathematics achievement
- Villupuram excels in both subjects

3.1.2. Karnataka

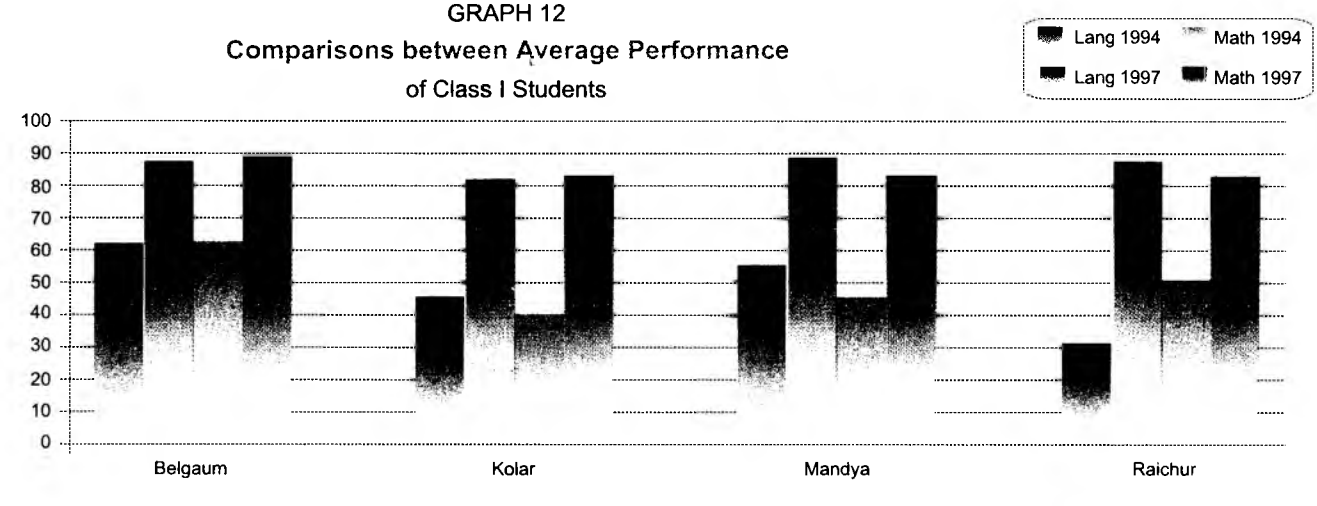
The undermentioned table portrays the average performance of class-I students demonstrated during 1997 and 1994.

Table 3.1.2. Comparisons between Average Performance of Class-I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Belgaum	69	87.95	714	61.76	26.19	69	94.00	714	62.40	31.60
2.	Kolar	50	81.74	586	46.39	35.35	50	83.47	586	40.52	42.95
3.	Mandya	30	89.10	587	56.01	33.09	30	83.78	587	46.23	37.55
4.	Raichur	5	88.74	555	57.96	30.78	5	82.39	555	50.40	31.99

GRAPH 12

Comparisons between Average Performance of Class I Students



The figures shown in Table 3.1.2 indicate that all the four districts have recorded a hike in achievement in both the subjects. In language the achievement graph has risen by 26.19% in Belgaum and by 35.35% in Kolar. Similarly in mathematics the hike has stepped up by 31.60% in Belgaum and by 42.95% in Kolar.

The data reveal that there is a pattern of growth and sequence in the increase in achievement across the districts. Of all the districts, it is Kolar that has laid its claim to the top position both in language and mathematics.

- Simultaneous hike demonstrated in both subjects by all districts.
- Hike in mathematics outscores language.
- Traces of pattern of growth and sequence in hike across the state.
- Kolar- the top performer

3.1.3. Haryana

The following table depicts the average performance of Class-I students exhibited during 1997 and 1994.

The data shown in Table 3.1.3 signify that hike in achievement in both subjects has been registered simultaneously in all districts. Whereas in language, it has risen by 0.98% in Jind and by 16.60% in Sirsa, in Mathematics it has surged ahead by 1-4.36% in Jind and by 25.11% in Sirsa. The hike in mathematics is more pronounced than in language.

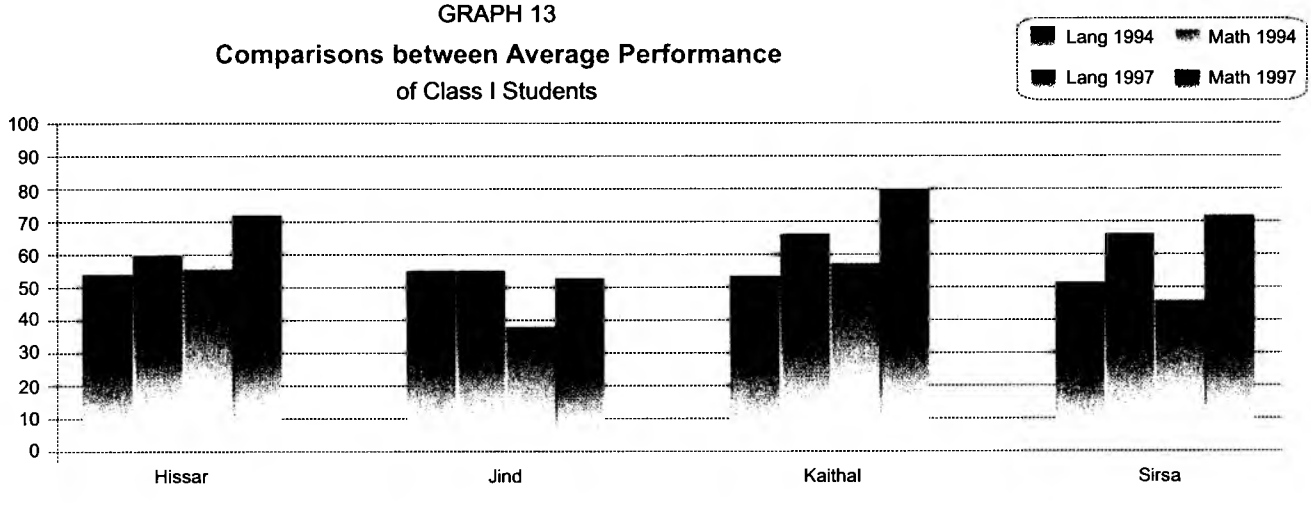
Incidentally like Karnataka the state of Haryana also establishes evidence of pattern of growth and sequence in the hike in achievement. Of all the districts, Sirsa is one that has captured the top position in both the subjects.

Table 3.1.3. Comparisons between Average Performance of Class-I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Hissar	94	60.80	621	53.10	7.70	94	72.34	621	56.93	15.41
2.	Jind	86	56.28	552	55.30	0.98	86	53.65	552	39.29	14.36
3.	Kaithal	78	67.37	665	53.30	14.07	78	80.68	665	58.64	22.04
4.	Sirsa	94	67.55	593	50.95	16.60	94	72.49	593	47.38	25.11

GRAPH 13

Comparisons between Average Performance of Class I Students



- All districts showcase a hike in both areas.
- Hike more pronounced in mathematics.
- Pattern of growth and sequence of achievemen prevails.
- Sirsi outshines others in both subjects.

3.1.4. Maharashtra

The table below illustrates the average performance of class-I students portrayed during 1997 and 1994.

The entries posted in Table 3.1.4 indicate that three out of five districts in language and four out of five in mathematics have demonstrated a hike in achievement. In language the hike has risen by 11.25% in Osmanabad and by 26.05% in Nanded and in mathematics by 15.22% in Latur and by 30.57% in Nanded. The achievement has, however, dipped in, two districts in language and in one district in mathematics.

Of all the districts it is Nanded that has captured the top position in both the subjects.

- Hike in language and mathematics confined to three and four districts respectively.
- Achievement plunges in language and mathematics in two and in one district respectively.
- Nanded comes through as a topper.

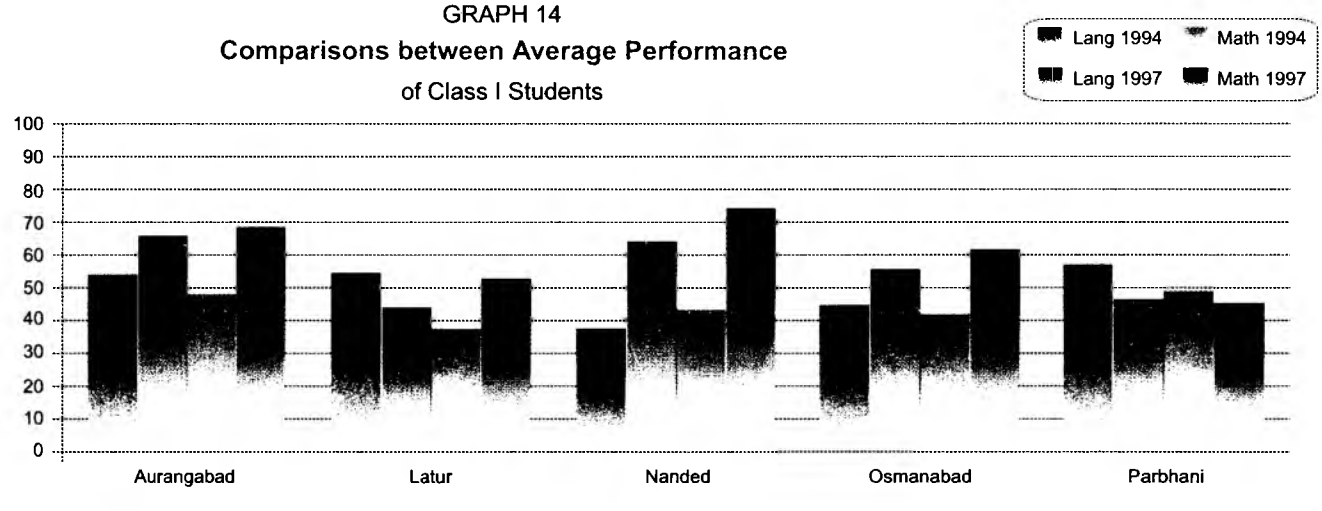
Table 3.1.4. Comparisons between Average Performance of Class-I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Aurangabad	100	65.65	674	53.60	12.05	100	67.36	674	47.71	19.65
2.	Latur	99	42.90	756	54.10	-11.20	99	52.36	756	37.14	15.22
3.	Nanded	88	63.65	634	37.60	26.05	88	72.86	634	42.29	30.57
4.	Osmanabad	77	55.90	719	44.65	11.25	77	61.29	719	41.21	20.08
5.	Parbhani	94	46.95	714	57.50	-10.55	94	46.29	714	49.64	-3.35

GRAPH 14

Comparisons between Average Performance

of Class I Students



3.1.5. Kerala

The following table presents the average performance of class-I students demonstrated during 1997 and 1994.

The figures shown in Table 3.1.5 signify that it is only Malappuram that has shown a hike of 7.55% in language. In mathematics the hike in achievement has been registered in two out of three districts varying by 4.78%in Kasargod and by 21.61% in Malappuram.

Two districts in language and one in mathematics have recorded a fall in achievement. Of all the districts, it is Malappuram that has consistently shown gains in performance in both the subjects.

- Hike in language in one district and in mathematics in two districts.
- Achievement plummets in language in two districts and in mathematics in one district.
- Malappuram demonstrates ace performance

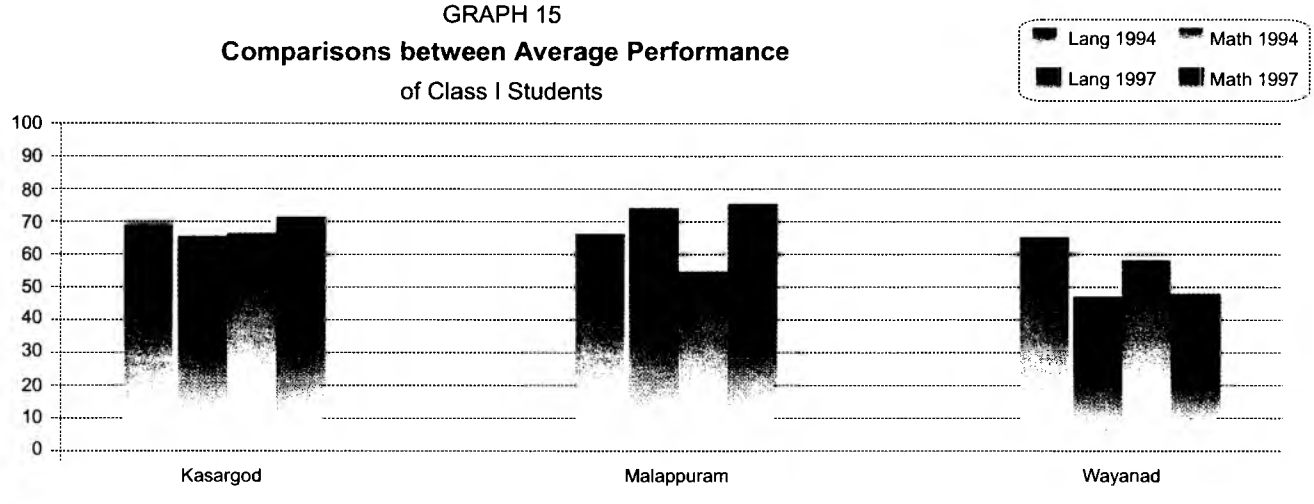
Table 3.1.5. Comparisons between Average Performance of Class-I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Kasargod	85	65.70	722	69.00	-3.30	85	71.21	722	66.43	4.78
2.	Malappuram	96	73.55	794	66.00	7.55	96	75.90	794	54.29	21.61
3.	Wayanad	82	47.16	714	65.50	-18.34	82	48.00	714	58.57	-10.57

GRAPH 15

Comparisons between Average Performance

of Class I Students



3.1.6 Summing Up

The data discussed in the preceding paragraphs reveal that three states namely Karnataka, Tamil Nadu and Haryana have registered a hike in achievement simultaneously in both the subjects. Exceptions to this case are found in Maharashtra and Kerala where the performance has shown a decline in some of the districts.

The pattern of gains in achievement and its sequence is very much visible in the states of Haryana and Karnataka. Top performing districts in mathematics have been sited in all the DPEP Phase-I states. In addition to all this, it is observed that every state throws up a district which has consistently rendered an outstanding performance in both the subjects.

3.2. Comparison Between BAS 1997 and 1994 in Classes III/IV

The comparisons made between the average performance of students' achievement on BAS tests conducted in the year 1997 with that of the BAS tests held in the year 1994 in language and mathematics are discussed in the following paragraphs.

3.2.1. Tamil Nadu

The undermentioned table portrays the average performance of class-IV students demonstrated during 1997 and 1994.

The entries displayed in Table 3.2.1 signify that all the districts have registered a hike in achievement simultaneously in both the subjects. In language, the hike has soared by 2.38% in Thiruvannamalai and by 20.82% in Villupuram. In mathematics the hike has risen by 2.00% in Thiruvannamalai and by 23.72% in Villupuram. Of all the districts, Villupuram has given a lead in the hike in achievement.

- Simultaneous increase in achievement in both subjects across the state.
- Villupuram establishes a record hike in both subjects.

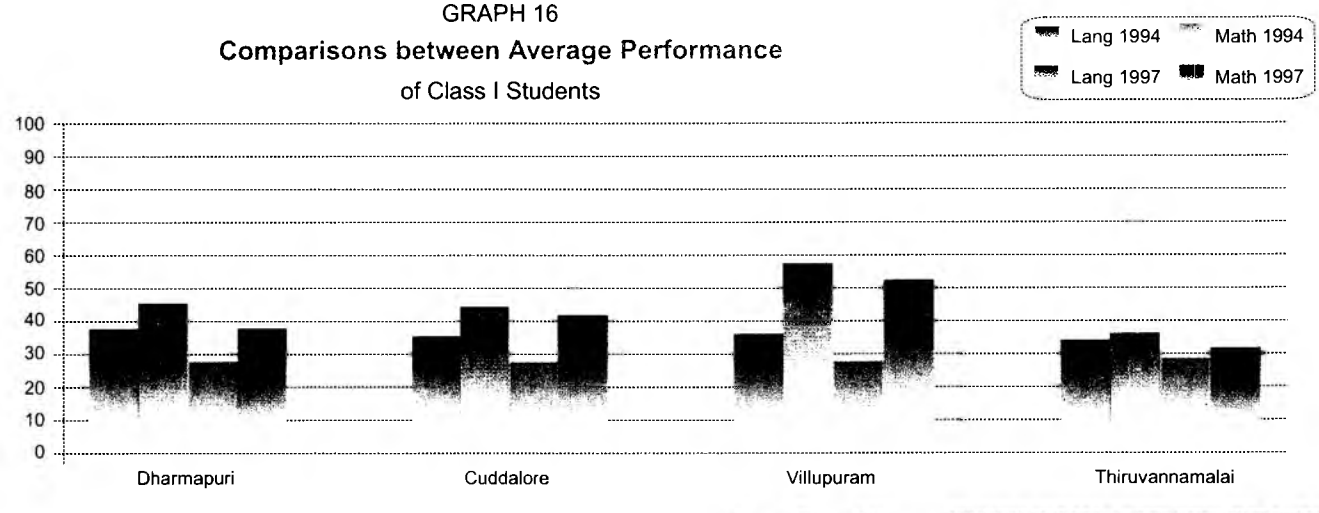
Table 3.2.1. Comparisons between Average Performance of Class IV Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Dharmapuri	150	46.41	692	38.50	7.91	150	38.15	692	28.13	10.02
2.	Cuddalore	84	57.30	961	36.48	7.14	84	41.70	961	27.69	14.01
3.	Villupuram	147	46.32	-	36.48	20.8	147	51.41	-	27.69	23.72
4.	Thiruvannamalai	96	36.23	644	33.85	2.38	96	30.94	644	28.94	2.00

GRAPH 16

Comparisons between Average Performance

of Class I Students



3.2.2. Karnataka

The table below depicts the average performance of class-III students portrayed during 1997 and 1994.

The data displayed in Table 3.2.2 reveal that all the districts in the state have demonstrated a simultaneous hike in both the subjects. In language it has increased by 22.11% in Raichur and by 27.76% in Kolar. In mathematics the hike has inclined by 0.91% in Mandya and by 25.69% in Belgaum. The top position in language has gone to Kolar and in mathematics to Belgaum. The data also reveal that the hike in achievement is more pronounced in language than in mathematics.

- All districts register a simultaneous hike in both subjects.
- Hike more pronounced in language than in mathematics.
- Top position shared by Kolar in language and by Belgaum in mathematics.

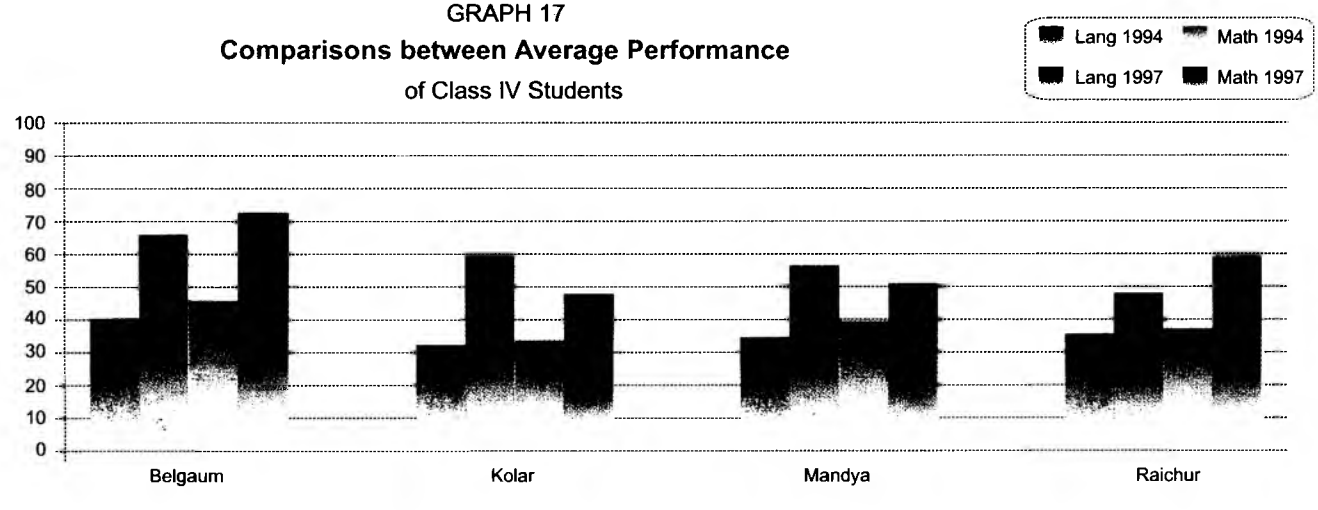
Table 3.2.2. Comparisons between Average Performance of Class IV Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Belgaum	89	66.30	798	40.09	26.21	89	71.94	798	46.25	25.69
2.	Kolar	48	59.46	550	31.70	27.76	48	48.34	550	32.75	15.59
3.	Mandya	38	57.00	640	34.66	22.34	38	40.41	640	39.50	0.91
4.	Raichur	38	58.34	580	36.23	22.11	38	59.40	580	38.00	21.40

GRAPH 17

Comparisons between Average Performance

of Class IV Students



3.2.3. Haryana

The following table illustrates the average performance of class-IV students demonstrated during 1997 and 1994.

The figures posted in Table 3.2.3 indicate that of the four districts, two in language and three in mathematics have recorded an increase in students' achievement. In language the hike has risen by 7.59% in Kaithal and by 20.12% in Sirsa. In mathematics the hike has soared by 3.42% in Hissar and by 19.49% in Sirsa. The performance has, however, taken a down swing in two districts in language and in one district in mathematics. In Jind, the performance has dipped in both the subjects. Of all the districts, Sirsa has rendered a commendable performance in both the subjects and has thus managed to capture the top position in the state.

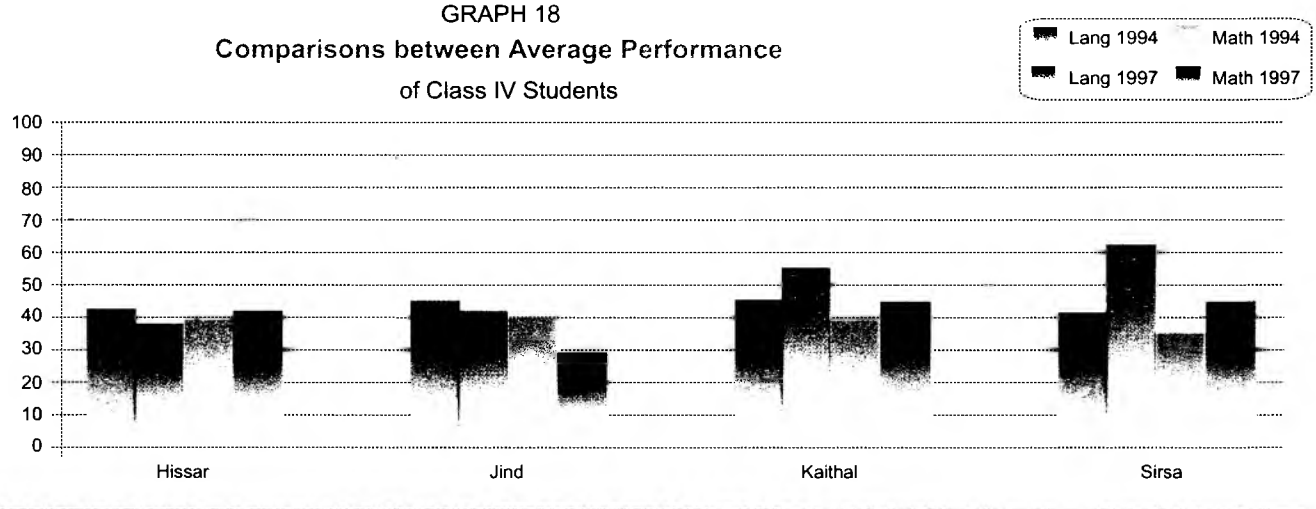
- Hike in achievement only in two districts in language and three in mathematics
- Performance in Jind dips in both the subjects
- Tops top in both subjects

Table 3.2.3. Comparisons between Average Performance of Class IV Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Hissar	130	37.77	593	41.99	-4.22	130	41.57	593	38.15	3.42
2.	Jind	100	41.21	717	46.33	-5.12	100	28.95	717	39.55	-10.60
3.	Kaithal	86	54.01	651	46.42	7.59	86	43.47	651	39.13	4.34
4.	Sirsa	112	61.27	555	41.15	20.12	112	54.14	555	34.65	19.49

GRAPH 18

Comparisons between Average Performance of Class IV Students



3.2.4 Maharashtra

The under mentioned table portrays the average performance of class-III students exhibited during 1997 and 1994.

The entries posted in Table 3.2.4 signify that of five districts, four districts have registered a hike in students' achievement both in language and mathematics. In language the hike has risen by 8.13% in Parbhani and by 13.89% in Latur and in mathematics by 9.69% in Latur and by 14.15% in Parbhani. However, the achievement in both subjects has taken a down swing in Nanded. While Latur has displayed a superior performance in language, it is Parbhani that has recorded an all time high in mathematics.

- Simultaneous hike in four districts in both subjects.
- Performance in both subjects takes a dip in Nanded.
- Latur and Parbhani share the top position in language and mathematics respectively.

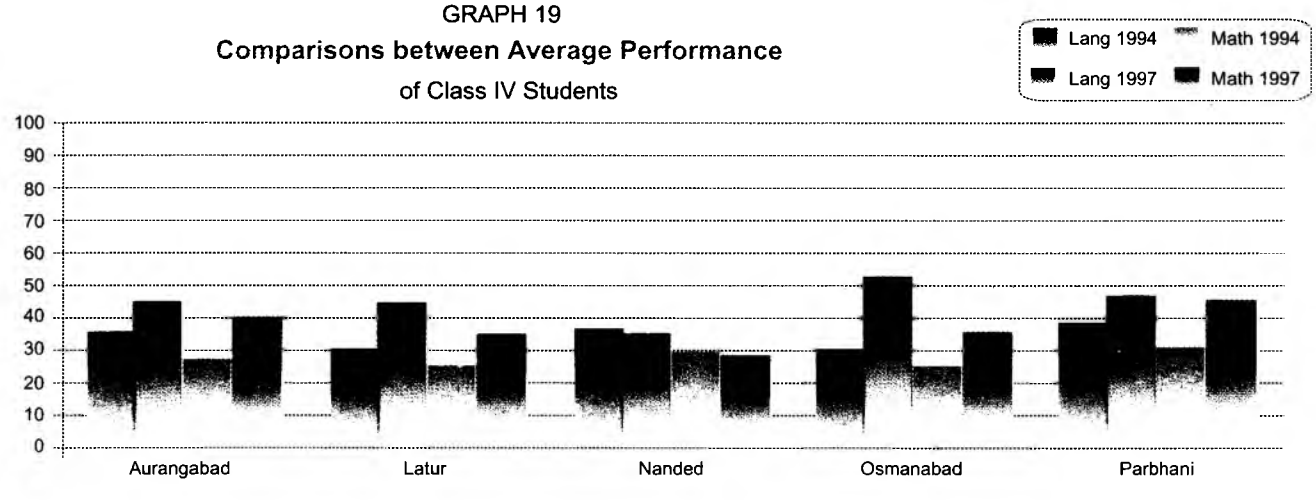
Table 3.2.4: Comparisons between Average Performance of Class-III Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Aurangabad	148	45.00	746	36.70	8.30	148	39.93	746	27.20	12.73
2.	Latur	109	44.00	816	30.11	13.89	109	35.17	816	25.48	9.69
3.	Nanded	111	35.25	610	37.11	-1.86	111	28.88	610	29.50	-0.62
4.	Osmanabad	129	42.55	842	30.66	11.89	129	35.83	842	25.43	10.40
5.	Parbhani	111	47.20	790	39.07	8.13	111	44.88	790	30.73	14.15

GRAPH 19

Comparisons between Average Performance

of Class IV Students



3.2.5. Kerala

The following table represents the average performance of class-III students demonstrated during 1997 and 1994.

The data displayed in Table 3.2.5 reveal that of all the three districts, two districts have recorded a simultaneous hike in both the subjects. Gains in language have risen by 8.78% in Malappuram and by 11.59% in Kasargod. In mathematics the achievement has risen by 9.28% in Malappuram and by 9.85% in Kasargod. The performance of students in the district of Wayanad has, however, dipped in both the subjects. Of all the districts, Kasargod has claimed the top position.

3.2.6. Summing Up

The data discussed in the preceding paragraphs reveal that the states of Tamil Nadu and Karnataka have recorded a simultaneous like in students' achievement in both the subjects. Exceptions to this case are observed in the states of Haryana, Maharashtra and Kerala wherein the performance has shown a decline in some of the districts. In the states of Karnataka, the hike in achievement is more pronounced in language than in mathematics. The top performing districts in both subjects are Villupuram in Tamil Nadu, Sirsa in Haryana and Kasargod in Kerala. Incidentally, Jind in Haryana, Nanded in Maharashtra and Wayanad in Kerala have shown depressed results in both the subjects.

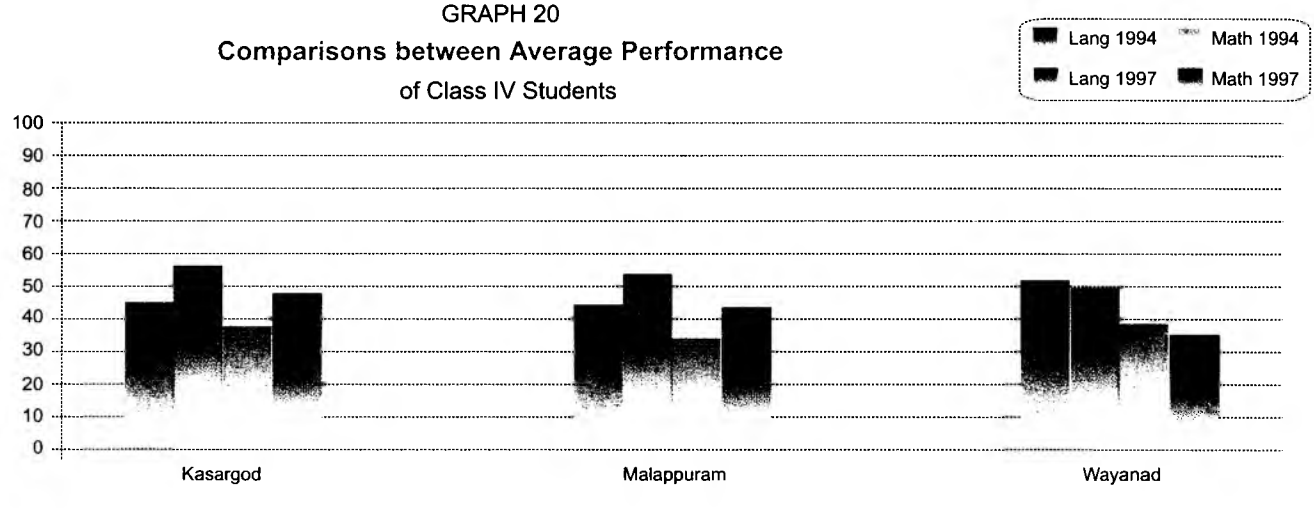
- Simultaneous hike in achievement registered in two districts in both subjects.
- Performance in Wayanad plummets in both subjects
- Top position goes to Kasargod

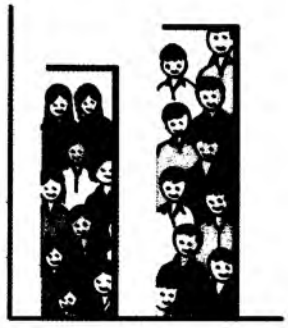
Table 3.2.5: Comparisons between Average Performance of Class-I Students

S. No.	Districts	Mean Percent of Students' Performance									
		Language					Mathematics				
		1997		1994			1997		1994		
		N	Mean%	N	Mean%	Difference	N	Mean%	N	Mean%	Difference
1.	Kasargod	110	56.82	977	45.23	11.59	110	48.35	977	38.50	9.85
2.	Malappuram	142	53.55	1129	44.77	8.78	142	43.28	1129	34.00	9.28
3.	Wayanad	131	49.93	983	51.36	-1.43	131	35.85	983	39.50	-3.65

GRAPH 20

Comparisons between Average Performance of Class IV Students





CHAPTER 4

Achievement Gaps in Gender and Social Groups in Class I Under BAS-1994 and MAS-1997

This chapter provides for comparative data showing achievement gaps exhibited on BAS-1994 and MAS-1997 in gender and social groups in class-I. This analysis has been necessitated to gauging the extent of realisation of one of the DPEP objectives of reducing the differences in learning among gender and social groups to less than five percent.

An account of the achievement gaps that have surfaced in class-I in respect of gender, area and category during BAS-1994 and MAS-1997 is separately discussed in the following paragraphs.

4.1.1. Genderwise Achievement Gaps in Class-I in Tamil Nadu

The undermentioned table portrays genderwise performance of class-I students and the gaps in chievement exhibited during BAS-1994 and MAS-1997 both in language and mathematics.

The data shown in Table 4.1.1 reveal that the overall achievement gaps between boys and girls in both the

Table 4.1.1. Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Boys	37.00	59.61	32.86	54.36
		Girls	42.00	57.75	37.14	51.44
		Ach.Gaps	-5.00	1.86	-4.28	2.92
2	Cuddalore	Boys	40.00	67.75	36.43	64.67
		Girls	40.50	65.31	32.86	60.45
		Ach.Gaps	-0.50	2.44	3.57	4.22
3	Villupuram	Boys	40.00	78.53	36.43	77.79
		Girls	40.50	80.27	32.86	77.41
		Ach.Gaps	-0.50	-1.74	3.57	0.38
4	Thiruvannamalai	Boys	32.50	56.62	32.14	54.38
		Girls	32.00	56.07	27.86	50.25
		Ach.Gaps	0.50	0.55	4.28	4.13

subjects on BAS and MAS have dipped below the five percent mark in all the project districts. Only in some stray cases like in language in the districts of Cuddalore, Villupuram and Thiruvannamalai and in mathematics in Cuddalore it has marginally widened on MAS as against BAS.

4.1.2. Genderwise Achievement Gaps in Class-I in Karnataka

The table below displays genderwise performance of class-I students and the gaps in achievement exhibited during BAS-1994 and MAS-1997.

The entries displayed in Table 4.1.2 indicate that the overall achievement gaps between boys and girls in both the subjects on BAS as well as on MAS have fallen below the five percent mark in all the project districts. The achievement gaps reflected under MAS signify that in the district of Kolar both in language and mathematics and in the district of Raichur in language the gaps are in favour of girls.

4.1.3. Genderwise Achievement Gaps in Class-I in Haryana

The Table 4.1.3 illustrates genderwise performance of class-I students and the gaps in achievement portrayed during BAS-1994 and MAS-1997 both in language and mathematics.

Table 4.1.2 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Boys	59.69	87.50	-	89.50
		Girls	62.00	86.50	-	88.50
		Ach.Gaps	-2.31	1.00	-	1.00
2	Kolar	Boys	46.80	62.50	-	64.00
		Girls	45.90	63.50	-	66.50
		Ach.Gaps	0.90	-1.00	-	-2.50
3	Mandya	Boys	56.09	65.50	-	65.00
		Girls	55.02	63.00	-	61.00
		Ach.Gaps	1.07	2.50	-	4.00
4	Raichur	Boys	58.90	67.00	-	72.50
		Girls	55.60	71.00	-	72.00
		Ach.Gaps	3.30	-4.00	-	0.50

Table 4.1.3 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Boys	53.75	71.09	56.57	75.54
		Girls	52.30	68.31	56.71	72.67
		Ach.Gaps	1.45	2.78	-0.14	2.87
2	Jind	Boys	59.95	64.46	43.93	73.01
		Girls	51.60	62.02	35.64	68.65
		Ach.Gaps	8.35	2.44	8.29	4.36
3	Kaithal	Boys	51.35	72.18	60.29	81.14
		Girls	54.80	70.57	56.93	80.90
		Ach.Gaps	-3.45	1.61	3.36	0.24
4	Sirsa	Boys	52.95	73.79	42.21	81.61
		Girls	49.75	73.72	35.21	79.66
		Ach.Gaps	3.20	0.07	7.00	1.95

The data in Table 4.1.3 reveal that the overall achievement gaps between boys and girls under BAS and MAS have fallen below the 5% mark except in Jind in both the subjects under BAS and in Sirsa in mathematics under BAS. The data further reveal that the achievement gaps between boys and girls exhibited during BAS-1994 have by and large registered a decline during MAS-1997. Not only this, even these gaps have narrowed down to less than five percent both in language and mathematics in all the project districts.

- Achievement gaps hit a low of less than five percent in both the subjects in all the districts under MAS.
- Achievement gaps shrink on MAS as against BAS.

4.1.4. Genderwise Achievement Gaps in Class-I in Maharashtra

The following table represents genderwise performance of class-I students displayed during BAS-1994 and

Table 4.1.4 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Boys	55.20	71.75	50.43	69.60
		Girls	51.55	67.80	44.29	63.25
		Ach.Gaps	3.65	3.95	6.14	6.35
2	Latur	Boys	56.30	67.20	41.21	67.85
		Girls	46.85	64.00	33.14	64.75
		Ach.Gaps	9.45	3.20	8.07	3.10
3	Nanded	Boys	36.65	60.25	45.64	53.40
		Girls	38.70	57.75	38.14	50.80
		Ach.Gaps	-2.05	2.50	7.50	2.60
4	Osmanabad	Boys	45.85	79.75	40.71	76.75
		Girls	43.45	78.10	35.35	72.85
		Ach.Gaps	2.40	1.65	5.36	3.90
5	Parbhani	Boys	60.30	61.00	53.64	61.75
		Girls	54.45	56.15	45.21	53.85
		Ach.Gaps	5.85	4.85	8.43	7.90

MAS-1997 both in language and mathematics.

The figures shown in Table 4.1.4 indicate that the achievement gaps between boys and girls exhibited during BAS-1994 have registered a decline during MAS-1997 in three districts in language and in four districts in mathematics. Conspicuously, whereas the achievement gaps in mathematics on MAS have anchored to less than five percent in three out of five districts, in language it has scaled down to less than five percent in all the districts.

4.1.5. Genderwise Achievement Gaps in Class-I in Kerala

The table below depicts genderwise performance of class-I students and the gaps in achievement demonstrated during BAS-1994 and MAS-1997 both in language and mathematics.

The figures shown in Table 4.1.5 indicate that the achievement gaps between boys and girls exhibited during MAS have stood below five percent in both the subjects in all the project districts. The achievement gaps on MAS as against BAS have narrowed down in Kasargod in language and in all the project districts in mathematics. The achievement gaps in language favour girls in all districts under BAS and in two districts under MAS.

4.1.6. Summing up

The data discussed in the preceding paragraphs reveal that the achievement gaps between boys and girls in language and mathematics on MAS have dropped in four states to less than five percent. There is no clear cut pattern observed in so far as the depression in achievement gaps on MAS as against BAS is concerned. In certain stray cases the achievement gaps

Table 4.1.5 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Boys	66.50	75.15	68.57	74.35
		Girls	71.50	75.40	64.29	72.85
		Ach.Gaps	-5.00	-0.25	4.28	1.50
2	Malappuram	Boys	65.50	80.75	56.43	76.30
		Girls	66.50	82.10	52.14	75.85
		Ach.Gaps	-1.00	-1.35	4.29	0.45
3	Waynad	Boys	64.50	70.80	62.14	68.25
		Girls	66.50	67.60	54.29	63.70
		Ach.Gaps	-2.00	3.20	7.85	4.55

favour the girls.

4.2.1. Areawise Achievement Gaps in Class-I in Tamil Nadu

The table below illustrates areawise performance of class-I students and the gaps in achievement demonstrated during MAS-1997 both in language and mathematics.

The entries shown in Table 4.2.1 reveal that the areawise achievement gaps on MAS in language have fallen below the five percent mark in all the districts and with the exception of Dharmapuri it is also applicable in mathematics. The achievement gaps in mathematics

- Gaps in achievement stand below the five percent mark in all the districts barring Dharmapuri in mathematics.
- Girls stand to gain in mathematics in three districts.

Table 4.2.1 Areawise Achievement Gaps

S. No.	Districts	Area	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Urban	-	60.14	-	48.29
		Rural	39.55	58.46	35.29	54.37
		Ach. Gap	-	1.68	-	-6.08
2	Cuddalore	Urban	-	68.71	-	60.15
		Rural	40.25	65.96	34.79	63.06
		Ach. Gap	-	2.75	-	-2.91
3	Villupuram	Urban	-	81.77	-	79.64
		Rural	40.25	78.70	34.79	76.99
		Ach. Gap	-	3.07	-	2.65
4	Thiruvannamalai	Urban	-	58.26	-	49.10
		Rural	32.45	55.94	30.64	52.94
		Ach. Gap	-	2.32	-	-3.84

tend to favour girls in three out of four districts.

4.2.2. Areawise Achievement Gaps in Class-I in Karnataka

The following table portrays areawise performance of class-I students and the gaps in achievement exhibited during BAS-1994 and MAS-1997 in both the subjects.

Table 4.2.2. Areawise Achievement Gaps

S. No.	Districts	Area	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Urban	69.45	87.50	73.46	90.10
		Rural	59.70	83.50	59.43	85.00
		Ach. Gap	9.75	4.00	14.03	5.10
2	Kolar	Urban	42.89	65.00	40.13	68.50
		Rural	47.94	58.50	40.71	58.50
		Ach. Gap	-5.05	6.50	-0.58	10.00
3	Mandya	Urban	63.67	68.00	55.29	68.00
		Rural	54.20	65.00	44.09	65.50
		Ach. Gap	9.47	3.00	11.20	2.50
4	Raichur	Urban	57.98	70.50	48.99	76.00
		Rural	57.95	65.50	50.93	68.50
		Ach. Gap	0.03	5.00	-1.94	7.50

The data reflected in Table 4.2.2 signify that the areawise achievement gaps on MAS have fallen under the five percent mark in three districts in language and in one district in mathematics. Besides, the data reveal that the gaps in achievement have depressed on MAS as against BAS in two districts each in language and mathematics.

- Achievement gaps fall below the five percent mark in three districts in language and in one district in mathematics.
- Gaps squeeze in language and mathematics on MAS as against BAS only in two out of four districts.

4.2.3. Areawise Achievement Gaps in Class-I in Haryana

The undermentioned table displays areawise performance of class-I students and the gaps in achievement demonstrated during BAS-1994 and MAS-1997 both in language and mathematics.

The figures displayed in Table 4.2.3 indicate that the areawise achievement gaps on MAS have stood below the five percent mark in language in two districts and in mathematics in one district. The data also reveal that with the exception of Jind the achievement gaps in the remaining three districts have

- Achievement gaps on MAS dip on below five percent in two districts in language and in one in mathematics.
- Gaps on MAS as against BAS shrink in three districts both in language and mathematics.

Table 4.2.3. Areawise Achievement Gaps

S. No.	Districts	Area	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Urban	65.25	73.17	67.86	85.37
		Rural	49.80	69.09	54.00	72.05
		Ach. Gap	15.45	4.08	13.86	13.32
2	Jind	Urban	44.55	81.68	38.71	84.87
		Rural	57.20	58.55	39.43	67.31
		Ach. Gap	-12.65	23.13	-0.72	17.56
3	Kaithal	Urban	54.25	71.19	60.64	82.36
		Rural	53.10	71.57	58.29	80.60
		Ach. Gap	1.15	-0.38	2.35	1.76
4	Sirsa	Urban	59.75	79.97	57.36	88.74
		Rural	49.15	72.07	45.36	78.39
		Ach. Gap	10.60	7.90	12.00	10.35

squeezed in both the subjects on MAS as against BAS.

4.2.4. Areawise Achievement Gaps in Class-I in Maharashtra

The following table represents areawise performance of class-I students and the gaps in achievement displayed during BAS-1994 and MAS-1997 in both the subjects.

The data shown in Table 4.2.4 reveal that the areawise achievement gaps on MAS have gone below the five percent mark in two districts in language and in two in mathematics. The data also signify that gaps in achievement on MAS as against BAS have squeezed in two districts in language and in two in mathematics. In rest of the cases the achievement gaps have

- Two districts lay claim to achievement gaps below five percent mark in language and mathematics.
- Gaps on MAS as against BAS depress in two districts in language and in two in mathematics.

Table 4.2.4. Areawise Achievement Gaps

S. No.	Districts	Area	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Urban	66.30	65.75	57.00	58.05
		Rural	47.40	70.45	43.14	67.90
		Ach. Gap	18.90	-4.70	13.86	-9.85
2	Latur	Urban	47.15	70.40	30.93	75.65
		Rural	52.90	64.35	38.86	63.85
		Ach. Gap	-5.75	6.05	-7.93	11.80
3	Nanded	Urban	26.45	74.65	41.43	69.50
		Rural	42.20	52.80	42.64	45.20
		Ach. Gap	-15.75	21.85	-1.21	24.30
4	Osmanabad	Urban	61.35	76.65	56.64	75.55
		Rural	40.65	79.70	33.64	75.00
		Ach. Gap	20.70	-3.05	23.00	0.55
5	Parbhani	Urban	60.10	66.70	49.43	59.60
		Rural	56.15	56.50	49.71	57.45
		Ach. Gap	3.95	10.20	-0.28	2.15

neither fallen below the five percent mark nor have they squeezed on MAS as against BAS.

➲ Achievement gaps fall below the five percent mark only in two districts in mathematics.

4.2.5. Areawise Achievement Gaps in Class-I in Kerala

The table given below displays areawise performance of class-I students and the gaps in achievement portrayed during MAS-1997 both in language and mathematics.

The figures placed in Table 4.2.5 signify that areawise achievement gaps on MAS have been less than five percent only in mathematics in two out of three districts. In language the gaps in achievement have spurted above the five percent mark.

4.2.6. Summing Up

The discussion in the earlier paragraphs indicates that the achievement gaps between rural and urban areas in language and mathematics on MAS have not uniformally reached a position under the five percent mark. Similarly the gaps in achievement on MAS as

Table 4.2.5. Areawise Achievement Gaps

S. No.	Districts	Area	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Urban	-	80.25	-	77.20
		Rural	-	73.80	-	72.55
		Ach. Gap	-	6.45	-	4.65
2	Malappuram	Urban	-	88.60	-	85.20
		Rural	-	79.40	-	73.50
		Ach. Gap	-	9.20	-	11.70
3	Wayanad	Urban	-	63.60	-	64.55
		Rural	-	70.45	-	66.40
		Ach. Gap	-	-6.85	-	-1.85

against BAS have not depressed uniformally.

4.3.1. Categorywise Achievement Gaps in Class-I in Tamil Nadu

The table below illustrates the categorywise performance of class-I students and the gaps in achievement portrayed during BAS-1994 and MAS-1997 both in language and mathematics.

The data shown in Table 4.3.1 indicate that the categorywise achievement gaps on MAS have fallen below the five percent mark in language in two districts and in mathematics in one district. The squeeze in the achievement gaps on MAS as against BAS has occurred only in three districts in language. In mathematics the gaps in achievement have rather widened

- Achievement gaps fall below five percent mark in two districts in language and in one in mathematics.
- Gaps on MAS as against BAS reduce in language in three districts.
- Gaps in mathematics widen on MAS as against BAS in all districts.

Table 4.3.1 Categorywise Achievement Gaps

S. No.	Districts	Category	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Others	38.50	59.97	35.00	54.72
		SC/ST	43.00	55.62	37.86	48.67
		Ach. Gap	-4.50	4.35	-2.86	6.05
2	Cuddalore	Others	39.50	68.59	34.29	64.70
		SC/ST	31.00	63.28	34.29	59.11
		Ach. Gap	8.50	5.31	0.00	5.59
3	Villupuram	Others	39.50	79.36	34.29	76.98
		SC/ST	31.00	79.46	34.29	78.34
		Ach. Gap	8.50	-0.10	0.00	-1.36
4	Thiruvannamalai	Others	33.00	59.78	30.00	55.54
		SC/ST	32.00	50.49	30.00	46.70
		Ach. Gap	1.00	9.29	0.00	8.84

in all the districts on MAS as against BAS.

4.3.2. Categorywise Achievement Gaps in Class-I in Karnataka

The following table portrays the categorywise performance of class-I students and the gaps in achievement demonstrated during MAS-1997.

The figures displayed in Table 4.3.2 demonstrate that the categorywise achievement gaps on MAS have dropped below the five percent mark in two districts in language and in three districts in mathematics. In the district of Kolar the existing gaps are in favour of

- Achievement gaps on MAS dip below the five percent mark in language in two districts and in mathematics in three districts.
- Gaps [illegible] in the case of the category Kolar

Table 4.3.2. Categorywise Achievement Gaps

S. No.	Districts	Category	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Others	-	87.28	-	87.45
		SC/ST	-	79.36	-	86.19
		Ach. Gap	-	7.92	-	1.26
2	Kolar	Others	-	59.93	-	61.23
		SC/ST	-	62.54	-	63.82
		Ach. Gap	-	-2.61	-	-2.59
3	Mandya	Others	-	64.77	-	64.85
		SC/ST	-	63.59	-	62.07
		Ach. Gap	-	1.18	-	2.78
4	Raichur	Others	-	70.52	-	73.53
		SC/ST	-	62.12	-	67.22
		Ach. Gap	-	8.40	-	6.31

girls.

4.3.3. Categorywise Achievement Gaps in Class-I in Haryana

The table given below displays the categorywise performance of class-I students and the gaps in achievement exhibited during BAS-1994 and MAS-1997.

The data presented in table 4.3.3 denote that the categorywise achievement gaps have stood below the five percent mark in language in one district and in mathematics in three districts. The reduction in gaps on MAS as compared to BAS has taken place only in

- Achievement gaps stand below the five percent mark in language in one district and in mathematics in three districts.
- Gaps narrow on MAS vs. BAS in language in one district and in mathematics in two districts.

Table 4.3.3. Categorywise Achievement Gaps

S. No.	Districts	Category	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Others	54.10	74.48	59.93	76.46
		SC/ST	51.90	64.22	53.21	71.44
		Ach. Gap	2.20	10.26	6.72	5.02
2	Jind	Others	57.50	63.90	41.36	71.12
		SC/ST	50.15	61.93	34.50	70.41
		Ach. Gap	7.35	1.97	6.86	0.71
3	Kaithal	Others	55.35	74.33	45.14	82.47
		SC/ST	48.45	65.84	42.29	78.20
		Ach. Gap	6.90	8.49	2.85	4.27
4	Sirsa	Others	52.35	76.99	48.57	82.54
		SC/ST	49.25	69.48	46.07	78.00
		Ach. Gap	3.10	7.51	2.50	4.54

one district in language and two in mathematics.

4.3.4. Categorywise Achievement Gaps in Class-I in Maharashtra

The following table presents categorywise performance of class-I students and the gaps in achievement displayed during BAS-1994 and MAS-1997.

The entries displayed in Table 4.3.4 indicate that the categorywise achievement gaps have held a position below the five percent mark in language and mathematics in four districts each. The data also reveal that the gaps on MAS as compared to the BAS have squeezed in language in two districts and in mathematics in three districts. The existing gaps in language

- Achievement gaps on MAS in language and mathematics seen below the five percent mark in four districts each.
- Gaps on MAS squeeze as against BAS in language in two districts and in mathematics in three districts.

Table 4.3.4. Categorywise Achievement Gaps

S. No.	Districts	Category	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Others	54.05	71.25	48.14	69.80
		SC/ST	52.15	69.75	46.29	62.00
		Ach. Gap	1.90	1.50	1.85	7.80
2	Latur	Others	52.85	67.25	39.86	67.00
		SC/ST	49.30	61.95	31.79	64.95
		Ach. Gap	3.55	5.30	8.07	2.05
3	Nanded	Others	37.35	57.95	44.14	49.55
		SC/ST	37.95	59.60	39.86	53.30
		Ach. Gap	-0.60	-1.65	4.28	-3.75
4	Osmanabad	Others	45.40	80.35	39.14	76.90
		SC/ST	43.20	77.45	36.07	72.95
		Ach. Gap	2.20	2.90	3.07	3.95
5	Parbhani	Others	59.45	57.80	49.14	58.00
		SC/ST	54.60	60.20	44.93	57.70
		Ach. Gap	4.85	-2.40	4.21	0.30

on MAS are in favour of girls in the districts of Nanded and Parbhani.

4.3.5. Categorywise Achievement Gaps in Class-I in Kerala

The under mentioned table depicts the categorywise performance of class-I students and the gaps in achievement demonstrated during BAS-1994 and MAS-1997.

The figures displayed in Table 4.3.5 reveal that the categorywise achievement gaps have dropped below the five percent mark in two out of three districts in both the subjects. The data also signify that the gaps on MAS as compared to BAS have depressed in language in all the districts and in mathematics in two districts. It may be pertinent to mention here that in Malappuram the achievement gaps have not only fallen under the five percent mark but the squeeze in gap on MAS as against BAS is also considerable like from 23.50% in language on BAS to 2.22% on MAS; similarly from 16.42% in mathematics on BAS to 3.34% on MAS.

- Achievement gaps on MAS dip below the five percent mark in two out of three districts in both the subjects.
- Gaps on MAS as against BAS depress in all the districts in language and in two districts in mathematics.
- Considerable depression in achievement gaps in Malappuram in both the subjects

4.3.6. Summing Up

The aforesaid discussion on categorywise achievement gaps across the five DPEP-Phase-I state reveal that the gaps in achievement have fallen below the five percent mark only in some of the districts. This phenomenon does not prevail uniformally across the states. Similarly, the achievement gaps on MAS as against BAS have depressed in some of the districts but again it is not a thumb rule. However, there are some noticeable trends that have surfaced from the data like in Kolar in Karnataka, the perceived gaps stand to favour the girls students. And in Malappuram in Kerala not only does the achievement gaps fall below the five percent mark in both the subjects but the squeeze on MAS as against BAS is also considerable.

Table 4.3.5. Categorywise Achievement Gaps

S. No.	Districts	Category	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Others	69.50	75.41	66.43	73.86
		SC/ST	63.50	73.95	58.57	70.90
		Ach. Gap	6.00	1.46	7.86	2.96
2	Malappuram	Others	67.50	81.57	55.71	76.34
		SC/ST	44.00	79.35	39.29	73.00
		Ach. Gap	23.50	2.22	16.42	3.34
3	Waynad	Others	70.00	72.85	61.43	70.47
		SC/ST	49.50	59.45	46.43	54.10
		Ach. Gap	20.50	13.40	15.00	16.37

CHAPTER 5

Achievement Gaps in Gender and Social Groups in Classes III/IV Under BAS-1994 and MAS-1997

This chapter gives a comparative account of the data displaying achievement gaps exhibited on BAS-1994 and MAS-1997 in gender and social groups in classes-III/IV. This analysis has been carried out for comprehending the extent of realization of one of the DPEP objectives of reducing the differences in learning among gender and social groups to less than five percent.

An account of the achievement gaps that have surfaced in classes-III/IV in respect of gender, area and category both on BAS-1994 and MAS-1997 is provided in the subsequent paragraphs.

5.1.1. Genderwise Achievement Gaps in Class-IV in Tamil Nadu

The table below displays genderwise performance of class-IV students and the gaps in achievement demonstrated during BAS-1994 and MAS-1997 in both the subjects.

Table 5.1.1 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Boys	38.16	45.61	27.76	38.08
		Girls	38.93	42.11	28.77	37.35
		Ach.Gaps	0.77	3.50	-1.01	0.73
2	Cuddalore	Boys	36.95	59.89	27.50	47.20
		Girls	36.01	59.64	27.87	48.31
		Ach.Gaps	0.94	0.25	-0.37	-1.11
3	Villupuram	Boys	36.95	51.25	27.50	50.11
		Girls	36.01	51.24	27.87	52.00
		Ach.Gaps	0.94	0.01	-0.37	-1.89
4	Thiruvannamalai	Boys	34.95	43.68	28.75	29.94
		Girls	32.41	43.58	28.91	29.85
		Ach.Gaps	2.54	0.10	-0.16	0.09

The entries displayed in Table 5.1.1 indicate that the overall achievement gaps between boys and girls in both the subjects on BAS and MAS have stood below the five percent mark in all the districts. The achievement gaps on MAS as compared to BAS have depressed in three out of four districts in language and in one in mathematics.

- Achievement gaps on MAS and BAS fall below the five percent mark in both subjects in all the districts.
- Gaps in achievement on MAS as against BAS shrink in three districts in language and in one in mathematics.

5.1.2. Genderwise Achievement Gaps in Class-III in Karnataka

The following table presents genderwise performance of class-III students and the gaps in achievement exhibited during MAS both in language and mathematics.

The figures shown in Table 5.1.2 indicate that the achievement gaps between boys and girls on MAS in both the subjects have fallen below the five percent mark in all the project districts. In Kolar the existing gaps are in favour of girls.

- Achievement gaps between boys and girls reduce to less than five percent in both the subjects in all the project districts.
- Gaps favour girls in Kolar in both the subjects.

Table 5.1.2 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Boys	-	59.42	-	59.18
		Girls	-	59.05	-	57.98
		Ach.Gaps	-	0.37	-	1.20
2	Kolar	Boys	-	36.65	-	32.90
		Girls	-	40.62	-	36.38
		Ach.Gaps	-	-3.97	-	-3.48
3	Mandya	Boys	-	44.63	-	44.18
		Girls	-	42.20	-	40.43
		Ach.Gaps	-	2.43	-	3.75
4	Raichur	Boys	-	47.72	-	49.40
		Girls	-	45.32	-	45.53
		Ach.Gaps	-	2.40	-	3.87

5.1.3. Genderwise Achievement Gaps in Class IV in Haryana

The under mentioned table illustrates the genderwise performance of class-IV students and the gaps in achievement portrayed during BAS-1994 and MAS-1997 in both the subjects.

The figures shown in Table 5.1.3 indicate that the overall achievement gaps between boys and girls on BAS and MAS in both the subjects have stood below the five percent mark in all the project districts. The gaps in achievement on MAS as against BAS have shown a decline in two districts in language and two in mathematics. It may be pertinent to mention here that in certain districts the existing achievement gaps are in favour of girls.

- Gaps in achievement on BAS and MAS dip below the five percent mark in both the subjects in all the districts.
- Achievement gaps on MAS as against BAS squeeze in two districts in language and in two in mathematics.
- Gaps on MAS in two districts in language and in three in mathematics favour girls.

Table 5.1.3 Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Boys	40.69	38.32	37.43	41.93
		Girls	43.86	38.29	39.18	44.84
		Ach.Gaps	-3.17	0.03	-1.75	-2.91
2	Jind	Boys	47.18	37.31	40.30	38.73
		Girls	45.57	37.89	38.85	40.90
		Ach.Gaps	1.61	-0.58	1.45	-2.17
3	Kaithal	Boys	46.24	42.92	40.68	44.57
		Girls	46.65	42.28	37.18	45.74
		Ach.Gaps	-0.41	0.64	3.50	-1.17
4	Sirsa	Boys	41.24	46.52	35.08	61.38
		Girls	41.94	47.28	39.35	59.85
		Ach.Gaps	-0.70	-0.76	-4.27	1.53

5.1.4. Genderwise Achievement Gaps in Class-III in Maharashtra

The following table presents genderwise performance of class-III students and the gaps in achievement displayed during BAS and MAS both in language and mathematics.

The data shown in Table 5.1.4 reveal that the overall gaps between boys and girls on BAS and MAS in both the subjects have fallen below the five percent mark across all the five project districts. Not only that, the achievement gaps exhibited during BAS-1994 have scaled down during MAS-1997 in three out of five districts in language and mathematics.

- Overall achievement gaps dip below the five percent mark both on BAS and MAS.
- Gaps in achievement on MAS as against BAS squeeze in three districts in language and mathematics.

Table 5.1.4. Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Boys	38.43	33.17	28.20	37.20
		Girls	34.57	33.45	26.08	35.85
		Ach.Gaps	3.86	-0.28	2.12	1.35
2	Latur	Boys	31.61	40.35	26.08	27.15
		Girls	28.39	40.23	24.88	26.75
		Ach.Gaps	3.22	0.12	1.20	0.40
3	Nanded	Boys	38.20	39.28	30.28	26.78
		Girls	35.80	35.08	28.55	22.85
		Ach.Gaps	2.40	4.20	1.73	3.93
4	Osmanabad	Boys	30.43	45.26	25.85	32.98
		Girls	30.93	42.82	25.00	30.95
		Ach.Gaps	-0.50	2.44	0.85	2.03
5	Parbhani	Boys	40.73	36.26	32.00	22.75
		Girls	36.48	36.08	28.78	23.98
		Ach.Gaps	4.25	0.18	3.22	-1.23

5.1.5. Genderwise Achievement Gaps in Class-III in Kerala

The following table presents genderwise performance of class-III students and the gaps in achievement exhibited during BAS and MAS both in language and mathematics.

The figures shown in Table 5.1.5 reveal that the overall achievement gaps between boys and girls on BAS and MAS have stood below the five percent mark in both the subjects in all the project districts. In two out of three districts in language and in one out of three in mathematics the existing gaps are in favour of girls on MAS.

- Gaps in achievement fall below the five percent mark both on BAS and MAS.
- Gaps on MAS favour girls in two districts in language and in one in mathematics

5.1.6. Summing Up

The data discussed in the earlier paragraphs reveal that the overall achievement gaps between boys and girls in language and mathematics both on BAS-1994 and on MAS-1997 have fallen below the five percent mark in all the project districts. There are certain stray cases wherein the achievement gaps are in favour of girls. Besides the data also reveal that the achievement gaps on MAS as compared to BAS have shrunk in three districts in language and in one in mathematics in the state of Tamil Nadu, in two in langauge and in two in mathematics in the state of Haryana and three in language and three in mathematics in the state of Maharashtra.

Table 5.1.5. Genderwise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Boys	45.68	50.85	39.00	40.05
		Girls	45.00	51.78	37.75	37.45
		Ach.Gaps	0.68	-0.93	1.25	2.60
2	Malappuram	Boys	44.77	53.74	34.25	38.13
		Girls	44.77	53.03	34.00	35.95
		Ach.Gaps	0.00	0.71	0.25	2.18
3	Wayanad	Boys	51.36	49.83	39.25	36.85
		Girls	51.14	50.11	40.00	37.35
		Ach.Gaps	0.22	-0.28	-0.75	-0.50

5.2.1. Areawise Achievement Gaps in Class-IV in Tamil Nadu

The following table presents areawise performance of class IV students and the gaps in achievement exhibited during MAS both in language and mathematics.

The figures shown in Table 5.2.1 indicate that the achievement gaps between urban and rural students on MAS in both the subjects have fallen below the five percent mark in all the project districts except in Villuppuram where it turned out to be slightly more than the desired range. The data also reveal that the gaps are in favour of rural students in one district in language and in two districts in mathematics.

- Gaps in achievement on MAS fall below the five percent mark except in mathematics in Villupuram.
- Gaps favour rural students in three out of eight cases

Table 5.2.1: Areawise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Urban	-	44.21	-	36.40
		Rural	38.50	44.16	28.13	38.18
		Ach.Gaps	-	0.05	-	-1.78
2	Cuddalore	Urban	-	59.65	-	45.34
		Rural	36.48	59.80	27.69	48.47
		Ach.Gaps	-	-0.15	-	-3.13
3	Villupuram	Urban	-	54.04	-	56.05
		Rural	36.48	50.19	27.69	49.06
		Ach.Gaps	-	3.85	-	6.99
4	Thiruvannamalai	Urban	-	47.12	-	31.22
		Rural	33.85	42.92	28.94	29.63
		Ach.Gaps	-	4.20	-	1.59

5.2.2. Areawise Achievement Gaps in Class-III in Karnataka

The table below illustrates the performance of Class III students and the gaps in achievement displayed during MAS-1997 in both the subjects.

The entries posted in Table 5.2.2 indicate that the areawise achievement gaps on MAS have fallen below the five percent mark in two out of four districts in language and one out of four in mathematics. In rest of the cases the achievement gaps are yet to be brought down to the desired level. The data also reveal that the gaps are in favour of rural students in one district in language and in two districts in mathematics.

- Achievement gaps fall below the five percent mark on MAS in three out of eight cases.
- Gaps favour rural students in both the subjects in Belgaum and in mathematics in Kolar.

Table 5.2.2 Areawise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Urban	-	52.30	-	49.00
		Rural	-	60.00	-	58.70
		Ach.Gaps	-	-7.70	-	-9.70
2	Kolar	Urban	-	39.69	-	33.90
		Rural	-	37.80	-	34.50
		Ach.Gaps	-	1.89	-	-0.60
3.	Mandya	Urban	-	45.69	-	46.75
		Rural	-	41.50	-	39.75
		Ach.Gaps	-	4.19	-	7.00
4.	Raichur	Urban	-	49.84	-	56.75
		Rural	-	41.61	-	40.75
		Ach. Gaps	-	8.23	-	16.00

5.2.3. Areawise Achievement Gaps in Class IV in Haryana

The undermentioned table depicts the areawise performance of Class IV students and the achievement gaps demonstrated during BAS and MAS in both the subjects.

The figures shown in Table 5.2.3 signify that the areawise achievement gaps on MAS have fallen below the five percent mark in language in all the districts and in mathematics only in one district. The data also reveal that the gaps on MAS as against BAS have squeezed in three out of four districts only in language.

- Achievement gaps dip below the five percent mark in all the districts in language and in one in mathematics
- Gaps shrink on MAS as against BAS in three out of four districts only in language

Table 5.2.3 Areawise Acheivement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Urban	45.00	39.73	38.95	48.00
		Rural	41.23	38.46	37.95	41.93
		Ach.Gaps	3.77	1.27	1.00	6.07
2	Jind	Urban	52.74	39.16	42.63	46.00
		Rural	44.94	37.66	38.88	38.35
		Ach.Gaps	7.80	1.50	3.75	7.65
3	Kaithal	Urban	47.29	42.84	36.18	39.92
		Rural	46.24	42.62	39.78	46.72
		Ach.Gaps	1.05	0.22	-3.60	-6.80
4	Sirsa	Urban	43.96	49.73	34.60	60.33
		Rural	40.48	46.22	34.65	61.53
		Ach.Gaps	3.48	3.51	-0.05	-1.20

5.2.4. Areawise Achievement Gaps in Class-III in Maharashtra

The following table presents the areawise performance of class-III students and the gaps in achievement displayed during BAS and MAS both in language and mathematics.

The figures shown in Table 5.2.4. indicate that areawise achievement gaps on MAS have dipped below the five percent mark only in one district in language and in two districts in mathematics. In rest of the cases the gap are yet to come down to the desired level. The data also reveal that the gaps in achievement on MAS as compared to BAS have sequeezed only in two districts in language and two districts in mathematics.

- Achievement gaps dip below the five percent mark in three out of ten cases.
- Gaps on MAS as against BAS dip less in four out of ten cases.

Table 5.2.4. Areawise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Urban	42.23	33.83	31.75	29.83
		Rural	31.36	33.17	23.70	38.38
		Ach.Gaps	10.87	0.66	8.05	-8.55
2	Latur	Urban	29.45	44.42	24.33	26.85
		Rural	32.45	39.03	25.85	26.98
		Ach.Gaps	-3.00	5.39	-1.52	-0.13
3	Nanded	Urban	37.84	43.12	28.30	28.38
		Rural	36.82	35.15	30.00	23.55
		Ach.Gaps	1.02	7.97	-1.70	4.83
4	Osmanabad	Urban	42.50	48.65	32.50	38.05
		Rural	27.57	42.46	23.63	29.98
		Ach.Gaps	14.93	6.19	8.87	8.07
5	Parbhani	Urban	41.16	43.35	32.40	30.75
		Rural	38.82	33.58	29.55	20.63
		Ach.Gaps	2.34	9.77	2.85	10.12

5.2.5. Areawise Achievement Gaps in Class-III in Kerala

The table below portrays the areawise performance of class-III students and the gaps in achievement demonstrated during MAS in both the subjects.

The data shown in Table 5.2.5 indicate that the achievement gaps between urban and rural students on MAS have fallen below the five percent mark in both the subjects in the district of Kasargod and only in mathematics in the district of Wayanad. In rest of the three cases these gaps are beyond the desired level. The data also reveal that the existing gaps in mathematics in the district of Wayanad are in favour of rural students.

- Gaps in achievement dip below the five percent mark in Kasargod in both the subjects and in Wayanad in mathematics
- Gaps favour rural students in mathematics in Wayanad

Table 5.2.5. Areawise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Urban	-	54.38	-	41.70
		Rural	-	50.20	-	37.80
		Ach.Gaps	-	4.18	-	3.90
2	Malappuram	Urban	-	61.29	-	46.40
		Rural	-	51.15	-	34.38
		Ach.Gaps	-	10.14	-	12.02
3	Wayanad	Urban	-	56.74	-	34.00
		Rural	-	48.43	-	37.80
		Ach.Gaps	-	8.31	-	-3.80

5.2.6. Summing Up

The aforesaid discussion on areawise achievement gaps across all the five DPEP states reveals that the gaps in achievement on MAS have fallen below the five percent mark only in some of the districts. This phenonmenon is not uniformally applicable across the subjects in all the states. Similarly, the achievement gaps on MAS as compared to BAS have squeezed only in a limited number of cases. In certain stray cases the achievement gaps seemed to have favoured rural students.

5.3.1. Categorywise Achievement Gaps in Class IV in Tamil Nadu

The table below displays categorywise performance of Class IV Students and the gaps in achievement demonstrated during BAS-94 and MAS-97 in both the subjects.

The data posted in Table 5.3.1 indicate that the overall achievement gaps between SC/ST and others in both the subjects on BAS as well as on MAS have dipped below the five percent mark in all the districts except on MAS in Thiruvannamalai. The data also reveal that the gaps in achievement on MAS as against BAS have widened in five out of eight cases.

- Overall achievement gaps dip below five percent mark both on BAS and MAS in all the districts except in MAS in Thiruvannamalai
- Gaps on MAS as against BAS widen in five out of eight cases

Table 5.3.1: Categorywise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Dharmapuri	Others	38.64	44.60	28.17	38.48
		SC/ST	37.49	42.78	28.13	35.54
		Ach.Gaps	1.15	1.82	0.04	2.94
2	Cuddalore	Others	37.23	59.76	28.17	48.91
		SC/ST	35.13	59.78	26.85	45.76
		Ach.Gaps	2.10	-0.02	1.32	3.15
3	Villupuram	Others	37.23	51.97	28.17	50.98
		SC/ST	35.13	50.20	26.85	50.97
		Ach.Gaps	2.10	1.77	1.32	0.01
4	Thiruvannamalai	Others	34.05	47.47	29.14	33.12
		SC/ST	33.07	37.26	28.14	24.56
		Ach.Gaps	0.98	10.21	1.00	8.56

5.3.2. Categorywise Achievement Gaps in Class III in Karnataka

The following table presents the categorywise performance of class III students and the gaps in achievement exhibited during MAS both in language and mathematics.

The figures shown in Table 5.3.2 reveal that the overall categorywise achievement gaps on MAS in both the subjects have dropped below the five percent mark in all the project districts. Not only that, the existing gaps in quite a number of cases are in favour of SC and ST students.

- Overall achievement gaps stand below the five percent mark
- Gaps in achievement favour SC and ST students in most cases

Table 5.3.2: Categorywise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Belgaum	Others	-	60.12	-	56.61
		SC/ST	-	63.15	-	60.28
		Ach.Gaps	-	-3.03	-	-3.67
2	Kolar	Others	-	38.48	-	34.09
		SC/ST	-	41.79	-	33.88
		Ach.Gaps	-	-3.31	-	0.21
3	Mandya	Others	-	42.03	-	40.86
		SC/ST	-	43.55	-	43.03
		Ach.Gaps	-	-1.52	-	-2.17
4	Raichur	Others	-	48.95	-	48.06
		SC/ST	-	48.09	-	48.86
		Ach.Gaps	-	0.86	-	-0.80

5.3.3. Categorywise Achievement Gaps in Class IV in Haryana

The under mentioned table displays the categorywise performance of Class IV students and the gaps in achievement exhibited during BAS-1994 and MAS-1997.

The figures shown in table 5.3.3 reveal that the overall categorywise achievement gaps on BAS and MAS have fallen below the five percent mark both in language and mathematics in all the project districts except in mathematics in the district of Kaithal where it has turned out to be slightly higher than the desired level. The data also reveal that the gaps in achievement have scaled down in half of the cases on MAS as compared to BAS.

- Overall achievement gaps stand below the five percent mark except in Kaithal in mathematics.
- Gaps reduce on MAS as against BAS in half of the cases

Table 5.3.3: Categorywise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Hissar	Others	42.44	38.66	39.30	44.26
		SC/ST	40.51	37.77	34.43	41.90
		Ach.Gaps	1.93	0.89	4.87	2.36
2	Jind	Others	46.62	38.06	39.65	40.22
		SC/ST	44.88	36.18	39.00	38.30
		Ach.Gaps	1.74	1.88	0.65	1.92
3	Kaithal	Others	46.84	43.40	39.94	46.54
		SC/ST	45.15	40.84	36.65	41.18
		Ach.Gaps	1.69	2.56	3.29	5.36
4	Sirsa	Others	41.85	47.12	35.53	60.69
		SC/ST	39.88	46.47	32.88	60.54
		Ach.Gaps	1.97	0.65	2.65	0.15

5.3.4. Categorywise Achievement Gaps in Class III in Maharashtra

The table below portrays categorywise performance of class III students and the gaps in achievement demonstrated during BAS-1994 and MAS-1997 in both the subjects.

The data displayed in Table 5.3.4 reveal that the overall categorywise achievement gaps on BAS and MAS have dipped below the five percent mark both in language and mathematics in all the project districts except in mathematics in Latur under BAS. The data also indicate that the gaps in achievement on MAS as compared to BAS have depressed in six out of ten cases.

- Overall achievement gaps both on BAS and MAS dept below the five percent mark except in Latur in mathematics under BAS.
- Gaps squeeze on MAS as against BAS in six out of ten cases.

Table 5.3.4: Categorywise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Aurangabad	Others	37.19	33.23	27.78	37.32
		SC/ST	37.57	33.66	27.22	32.50
		Ach.Gaps	-0.38	-0.43	0.56	4.82
2	Latur	Others	30.19	40.82	27.16	27.71
		SC/ST	29.10	38.95	21.61	24.94
		Ach.Gaps	1.09	1.87	5.55	2.77
3	Nanded	Others	36.60	37.09	28.27	25.17
		SC/ST	39.34	37.75	33.15	24.39
		Ach.Gaps	-2.74	-0.66	-4.88	0.78
4	Osmanabad	Others	31.49	44.75	26.75	32.30
		SC/ST	27.89	41.25	26.33	30.53
		Ach.Gaps	3.60	3.50	0.42	1.77
5	Parbhani	Others	37.72	36.38	30.65	23.28
		SC/ST	41.75	35.54	31.14	23.51
		Ach.Gaps	-4.03	0.84	-0.49	-0.23

5.3.5. Categorywise Achievement Gaps in Class III in Kerala

The under mentioned table depicts the categorywise performance of Class III students and the gaps in achievement displayed during BAS and MAS in both the subjects.

The entries posted in Table 5.3.5 signify that the overall categorywise achievement gaps on BAS and MAS have fallen below the five percent mark except in language under MAS in Malappuram and again in language under both BAS and MAS in Wayanad. The figures also indicate that the gaps in achievement on MAS as against BAS have narrowed down in as many as four out of six cases.

- Overall achievement gaps stand below the five per cent mark except in language under MAS in Mallapuram and in language under BAS and MAS in Wayanad
- Gaps reduce on MAS as against BAS in four out of six cases.

5.3.6. Summing Up

The discussion on categorywise achievement gaps provided in the previous paragraphs reveals that the overall gaps in achievement have fallen below the five percent mark both under BAS and MAS quite a few districts. Besides, the gaps in achievement on MAS as compared to BAS have also depressed in more than fifty percent of the cases. However, in the state of Tamil Nadu the gaps in achievement have widened on MAS as against BAS. In the state of Karnataka the achievement gaps have stood in favour of SC and ST students in quite a large number of cases.

Table 5.3.5: Categorywise Achievement Gaps

S. No.	Districts	Gender	Mean Percent of Students' Performance			
			Language		Mathematics	
			BAS	MAS	BAS	MAS
1	Kasargod	Others	45.39	51.32	38.39	38.94
		SC/ST	43.22	51.01	36.46	37.52
		Ach.Gap	2.17	0.31	1.93	1.42
2	Malappuram	Others	45.20	53.83	34.56	37.11
		SC/ST	40.24	48.12	30.84	36.06
		Ach.Gap	4.96	5.71	3.72	1.05
3	Wayanad	Others	52.28	51.41	40.13	37.04
		SC/ST	46.97	44.21	37.67	37.34
		Ach.Gap	5.31	7.20	2.46	-0.30

CHAPTER 6

Implications

1. All the districts of Kerala, Karnataka and Haryana and three out of five in Maharashtra and two out of four in Tamil Nadu have witnessed an average performance of more than sixty percent in both the subjects in class-I. The remaining two districts in Maharashtra and two in Tamil Nadu have, however, exhibited the performance in the range of fifty to sixty percent.

In view of the above, it is suggested that while additional local specific inputs may be provided in the low performing districts of Maharashtra and Tamil Nadu, existing efforts may be stepped up in rest of the districts to push up their performance to the mastery level.

2. The overall average performance of Classes III/IV in both the subjects has not matched the performance of class I. The average performance of classes III/IV students on MAS in both the subjects have fluctuated between twenty three percent to sixty one percent. In a large number of cases students' performance has even stagnated below the forty percent mark.

From the account given above, the performance of classes III/IV students has not been very encouraging. This kind of situation warrants immediate action. The data from these low performing districts should be thoroughly re-analysed to identify the hard spots of learning and corrective measures may be devised on the basis of the subjectwise and districtwise analysis to produce the desired results.

3. The comparative assessment of the performance of class I students on BAS -1997 and BAS-1994 reveals a hike in both the subjects in three out of five states. However, a decline in the performance has been discerned in some of the districts of Maharashtra and Kerala.

In those districts where the hike in students' achievement is spectacular, the efforts may be made to sustain the gains and in districts where a decline in achievement is visible, concerted efforts may be made to rejuvenate the system.

4. Mixed results have been recorded for classes III/IV on comparison of students' assessment on BAS-1997 with that of BAS-1994. Whereas two states namely Tamil Nadu and Karnataka have demonstrated a hike in both the subjects, the remaining three states have shown a decline in some of the districts.

The above discussion signifies that research based area specific interventions are required for promoting the hike in students achievement.

5. The analysis of the data reveal that the genderwise gaps in achievement in all the states reported in this study have fallen below the five percent mark both for class-I and classes III/IV except in mathematics in class-I in the districts of Aurangabad and Parhbani in Maharashtra.

For the two districts indicated above, it is suggested that special inputs may be provided to bridge the gender gaps.

6. Unlike the gender gaps in achievement, the area and categorywise achievement gaps at the levels of class I and classes III/IV have not fallen below the five percent mark in a large number of cases. The existing gaps seem to favour the urban students and the non-SC/ST students.

In view of the above, it is suggested that a strategy may be devised that may help bridge the areawise and categorywise gaps in students' achievement in both the subjects.

ANNEXURE A

An Overview of the Tests Used in BAS and MAS

Class-1 Language Tests

BAS (n=20)	MAS (n=20)
(i) Recognition of Syllables (n=10)	(i) Recognition of words (n=20)
(ii) Recognition of Words (n=10)	

Class - I Mathematics Tests

S.No.	Competency	Number of Items	
		MAS (n=20)	BAS (n=14)
1.	Counting of Objects	2	-
2.	Counting of Two set of Objects (addition)	2	-
3.	Oral addition of two numbers upto 10	2	-
4.	Problem sums involving subtraction of single digit numbers	2	-
5.	Identifying a number after a given number	2	-
6.	Identifying a number just before a given number	2	-
7.	Identifying greater of two given numbers	2	3
8.	Identifying smaller of two given numbers	2	3
9.	Writing the sum of two numbers upto 10	2	4
10.	Writing the difference of two numbers upto ten	2	4

Class - III Language Tests

BAS (n=44)	MAS (n=65)
(i) Word Knowledge (n=20)	(i) Word Knowledge (n=30)
(ii) Reading Comprehension (n=24)	(ii) Reading Comprehension (n=35)

Class III Tests in Mathematics

S.No.	Competency	Number of Items	
		MAS (n=40)	BAS (n=40)
I. Understanding whole numbers			
1.	Reads and writes number names of 2-digit numbers	1	-
2.	Reads and writes number names of 4-digit numbers	-	2
3.	States the place value of a digit in 3-digit number	1	1
4.	Identifies numbers preceding 3-digit numbers	1	-
5.	Identifies a number immediately after a 4-digit number	-	1
6.	Writes a 4-digit number in expanded form	-	2
7.	Identifies the smallest amongst the 4-digit numbers	-	1
8.	Arranges 4-digit numbers in ascending and descending order	-	1
9.	Identifies a number between 2 given numbers	1	-
10.	Identifies odd and even 2-digit numbers	1	-
11.	Identifies the place of a digit in 4-digit number	-	2
12.	Demonstrates understanding of ordinal numbers from 1-10	1	-
II. Addition, subtraction, multiplication and division of whole numbers			
13.	Adds two or three, 4 - digit numbers with carrying	2	2
14.	Subtracts 3-digit numbers with borrowing	1	2
15.	Subtracts 4-digit numbers without borrowing	-	1
16.	Subtracts 4-digit numbers with borrowing	-	1
17.	Solves word problems using addition and subtraction	2	2
18.	Represents repeated addition in terms of multiplication	1	-
19.	Uses the concept of multiplication to compare the numbers	1	-
20.	Multiplies two or three digit number with a single digit number using carrying	1	1
21.	Multiplies two or three digit number with a single digit number without carrying and involving zero	-	2
22.	Multiplies numbers by zero	1	-
23.	Divides a 3-digit number by a single digit without borrowing	1	2
24.	Solves word problems using multiplication and division	1	1
III. Simple Problems of Daily-life Relating to Units of Money, Length, Mass, Capacity, Area and Time			
25.	Makes any value upto Re 1using varrying collections of coins	-	2
26.	Adds value of notes of different denominations	1	-
27.	Writes money in decimal notation	-	1
28.	Solves simple money problems using either addition or subtraction without conversion	1	1
29.	Solves simple money problems using both addition and subtraction without conversion	1	-

30.	Solves simple money problems using either addition or subtraction with conversion	-	1
31.	Solves simple money problems using multiplication or division without conversion	2	2
32.	Solves simple money problems using multiplication or division with conversion	-	1
33.	Identifies the appropriate unit of length	1	-
34.	Solves simple problmes of length	1	-
35.	Adds lengths given in Kilometres and metres, without conversion	-	1
36.	Converts Kilograms into grams	1	1
37.	Solves simple problems of weight	1	-
38.	Converts litres into mililitres	1	1
39.	Compares the capacity of given utensils	1	-
40.	Solves problems of capacity	2	-
41.	Compares the areas of given figures	1	-
42.	Identifies the sequence of the months	1	-
43.	Uses a Calendar	1	-
44.	Reads time from the clock	1	1
45.	Adds time in hours and minutes without conversion	1	-
IV. Use of Fractions			
46.	Demonstrates understanding of fractions as part of regions	1	1
47.	Understands the concept of fraction as a part of one	-	1
48.	Addition of fractions with same denominator	-	1
V. Understanding of Geometrical Shapes			
49.	Counts the number of sides in a plane figure	-	1
50.	Identifies plane figures such as triangle and rectangle	2	-
51.	Identifies parts of a square and rectangle	2	-

Class-IV Language Tests

BAS (n=84)	MAS (n=70)
(i) Word Knowledge (n=40)	(i) Word Knowledge (n=35)
(ii) Reading Comprehension (n=44)	(ii) Reading Comprehension (n=35)

Class - IV Mathematics Tests

S.No.	Competency	Number of Items	
		BAS (n=40)	MAS (n=40)
I. Understanding whole numbers			
1.	Finds the greatest number out of given 4-digit numbers	1	-
2.	Identifies odd and even numbers	1	-
3.	Identifies prime numbers	1	1
4.	States the place value of a digit in a given number	2	2
5.	Reads and writes the number names	-	2
6.	Writes the numbers in expanded form	-	1
II. Addition, Subtraction, multiplication and division of whole numbers			
7.	Adds two or three 4-digit numbers with carrying	1	1
8.	Subtracts 4-digit numbers with borrowing	-	2
9.	Solves daily life problems involving addition and/or subtraction	2	2
10.	Understands various terms of multiplication such as multiple, multiplier and product	1	2
11.	Identifies the multipliers of a given number	1	-
12.	Multiplies the numbers, one of them being zero	1	1
13.	Finds the L.C.M. of two given numbers	3	1
14.	Identifies the prime factors of a given number	1	1
15.	Understands various terms of division such as divisor, dividend, quotient and remainder	2	1
16.	Divides a number by one digit number	-	2
17.	Solves daily life problem involving division	-	1
III. Simple Problems of Daily-life Relating to Units of Money, Length, Mass, Capacity, Area and Time.			
18.	Solves simple money problems using addition, subtraction, multiplication and division	4	2
19.	Applies unitary method to buying and selling problems	1	2
20.	Solves simple problems related to standard units of length	2	2
21.	Converts Kilograms into grams and vice-versa	2	-
22.	Solves simple problems related to weight	-	2
23.	States the unit of capacity	1	-
24.	Solves simple problems related to capacity	-	2
25.	Solves simple daily life problems related to time	3	1

IV. Use of Fractions, Decimals and Percentage

26.	Demonstrates understanding of proper fractions as parts of regions	1	1
27.	Identifies simple fractions	2	2
28.	Finds equivalent fractions	1	2
29.	Adds and subtracts given fractions	1	-
30.	Converts fractions to decimals	2	2
31.	Expresses units of length into decimals	1	-

V. Understanding of Geometrical Shapes

32.	Counts the number of sides in a plane figure	1	-
33.	States properties of a triangle and square	-	2

VI. Miscellaneous

34.	Solves problems related to speed and distance	1	-