

15 Copies.

District Primary Education Programme (DPEP)

Report on National Resource Camp

Udaipur

(3rd February - 12th February, 1997)

Educational Consultants India Ltd.

(A Government of India Enterprise)

C-24, Friends Colony

New Delhi - 110 065

EdCIL.org

www.edcil.org

Website: www.Edcil.org

Note

This report is not an account of the day to day activities at the National Resource Camp Udaipur from February 3rd - 12th, 1997. It attempts to provide a comprehensive view of the understanding that emerged in the Camp regarding the nature of an activity and issues related to the processes of learning in general, and of Language, Mathematics and Social Science in particular.

Details are available in Appendix 2.

Acknowledgements

Thanks are due to the resource persons, participants and the DPEP staff who have helped to put this report together.

CONTENTS

	Page Nos.
1. Introduction	1
2. Needs	2
3. Processes of Learning	3
4. Activity	5
5. Language	9
6. Mathematics	14
7. Environmental Studies, Science and Social Science	19
8. Presentations	22
9. Feedback	23
10. Appendices	24

Introduction

The rapid expansion of the District Primary Education Programme (DPEP) has emphatically brought out the need for trained resource groups at the state level while we have considerable resource group potential at the national level, but when spread over a large number of states at the same time, its limitations in purely pragmatic terms begin to surface. It was against this background that the first National Resource Camp (NRC) was held in Udaipur from February 3 to 12, 1997. The primary objective of the NRC was to provide inputs to resource groups at the state level towards initiating and sustaining qualitative changes in primary education.

Six states, namely Andhra Pradesh, Gujarat, Himachal Pradesh, Orissa, Uttar Pradesh and West Bengal, participated in the NRC. The total number of participants was approximately 106 with 12-20 participants from each state. The resource group included teachers from schools, colleges and universities, and representatives from various NGOs and DPEP. The primary objectives of the NRC were:

- To develop an understanding of what a good activity is.
- To develop an understanding of the processes of learning.
- To share experiences about the learning/ teaching of language, mathematics and EVS.
- To develop an activity based schedule for a week in a typical school of their state.

In order to work out the details of the proposed ten day workshop, a planning meet of the core resource group was organised from Feb 1 to February 2.

A number of important decisions regarding the organisation of the camp were also taken. Though the blueprint for the workshop was worked out in considerable detail, space was kept to accommodate day to day contingencies, as may be seen in Appendix 2.

The programme consisted of a total of fifty sessions, five sessions a day for ten days. Each session lasted for about two hours. Of the fifty sessions, approximately ten sessions were devoted to develop an understanding of the true nature of an activity. Seven sessions were devoted to language, six to mathematics and three to environmental studies and two to science. Developing an understanding of how a child learns and acquires knowledge was an integral part of most of the sessions. Approximately ten sessions were reserved for feedback, discussions, material production, library and future planning. There were also two informal sessions where participants could develop innovative activities and share each others socio-cultural experiences. Three sessions were kept for sharing the experiences in DPEP - I states in the areas of teacher's training, textbook development and problems in Block Resource Centre's Cluster Resource Centre's. Two sessions were devoted to special inputs in the area of primary education and social capital.

The whole camp was conducted in an extremely democratic way as each day's feedback from the participants became the basis for planning the sessions on the following day. It is very rare that camps of this sort spend so much time on planning the programme in minute detail.

Needs as Felt by the States

On the first day each individual member of the states' team was asked to enumerate the needs related to improvement of the academic quality of education in his state. This was followed by group discussion in each state. An analysis of the needs expressed by the participants in different states revealed that they had not focussed on the specific problems in different academic areas. Needs were expressed in the areas of teacher training, textbook development, evaluation, infrastructure, reduction in the administrative workload of teachers and recruitment of teachers. There was a definite lack of clarity in the needs expressed. For instance, there was no elaboration on what exactly is the kind of input required under the broad areas mentioned in each state.

However, certain problematic but unavoidable issues were stated clearly such as

- Loss of creativity (both among teachers and pupils) that inevitably results when a timetable is followed in the school.
- Teachers' involvement in other activities apart from concentrating on the teaching learning process.
- Developmental need of the child that should be kept in mind before creating any activity materials.
- Regular and meaningful supervision of school activities.

Processes of Learning

Introduction

A number of activities were done in this workshop to arrive at an understanding of the learning process. The following summary is based partly on the contributions made by the participants after they had gone through several sessions on understanding the processes of learning.

Background

1. Reflecting on the current scene in schools all over the world as well as in India it is clear that children "fail to develop more than a tiny part of their tremendous capacity for learning, understanding and creating with which they were born and of which they made full use during the first two to three years of their lives". (John Holt) *Deschooling*
2. The reason for this is seen to be the approach to the curriculum which has previously been perceived as a list of topics to be taught or scholastic competencies to be attained which are compiled into a syllabus where the learning objectives are defined by what the child "ought to know" and not by what the child "knows". *if he know then what is the use of learning*
3. Hence it was perceived by the participants that education can no longer be static, with subjects taught within rigid boundaries by a teacher within the four walls of a classroom but rather it is a dynamic process which liberates the child to think creatively by challenging him through well planned, purposeful activities.

Understanding that developed

1. The child is born with certain innate capacities which enable her to master an enormous quantum of learning in the first three years of her life and even to develop abstract system of thinking. She has an infinite capacity to explore. She has potential we cannot even imagine.
2. The child will learn only when she is in a relaxed atmosphere where she feels accepted and secure. Hence the need to create an informal atmosphere in the classroom and remove the fear of making mistakes, of being laughed at, punished for failing to reach some 'standards' set by the teacher.
3. The child will learn only what interests her and what she likes to learn. Therefore she does not learn, necessarily, step by step or one competency at a time - she may cover many competencies in a natural learning situation - hence her classroom should be designed as to provide 'infinite opportunity' to expand her knowledge and challenge her to think creatively.
4. The child learns constantly in her natural surroundings, so all situations can be used for learning. Hence learning can take place outside the classroom also.
5. The child has been on a journey of discovery from birth - hence the classroom must provide opportunity for further discovery and explanation in new areas of learning through provision of appropriate activities.
6. The child has so far been successful in her acquisition of skills and knowledge. Her experience in school should be such as to enhance her confidence in her own ability to learn new things by providing activities according to her ability level, which challenge or provoke her to think.

7. A teaching-learning interaction may set a child's mind thinking along some new line - hence the need for open ended activities and for teachers to be alert to the learning potential in such situations. In fact in all learning interaction in or outside the classroom, the role of the teacher as a facilitator of the child's learning is crucial, especially her skill in posing questions which challenge the child to think and go on thinking.
8. Learning process is not additive and linear but holistic.
9. The actual implementation of rule in practice is definite evidence of the fact that the child has internalised the rule of the concept. He may not be able to articulate it.
10. Mind on one hand has the ability to extract patterns on the other hand it has the ability to store something unique.
11. All learning involves a process of inquiry and we must create opportunities so that a child goes through this process.

Activity

Introduction

In this workshop an attempt was made to understand the meaning of an "activity". To achieve this goal the participants and the resource persons went through a process in which they were actively involved in participating, making, conducting and analysing activities for the first three days. They were also trying to find out how activities can be a means to facilitating learning in a more interactive and collaborative way.

Perceptions

The general understanding of the group about activity was that it is something that involves fun, movement, some incidental training or learning and can be occasionally used in the classroom. Yet perceptions of different participants about an activity based teaching process varied. There were some who felt that activities could be designed to meet some specific predetermined learning objectives aimed at achieving certain competencies. A need for a bank of competency based activities was also expressed. A general feeling was that activities may be used for Classes I & II, but cannot be used for teaching senior classes like IV & V. It was felt that activity based classroom gives no space for inputs in writing/corrections. A strong notion that stayed with the group perhaps even at the end of the workshop was that if one has a activity based classroom then one cannot "finish" the syllabus in the given time limit. *It was felt that to make an activity based class room a success the textbook development and teachers training process should move in tandem and this is never feasible in reality.*

A number of difficulties were faced in internalising the concept of an activity as the learning process. To begin with the participants felt uncomfortable with what they thought was a process in contradiction to the M.L.L. concept. It was also felt that a lot of activities are already known and the question is that of increasing the motivation level of the teachers to use these activities. Moreover, at the end of the ten-day interaction, participant had moved considerably from these perceptions.

Some of the difficulties that arose included the following:

- For a long time, the belief persisted that activity is means only physical activity. This was later clarified and an understanding was emerged that activity takes place at the mental level and *may or may not* involve physical activity.
- Participant expressed the need for teacher to be extremely enterprising and resourceful in order to provide a better environment for the child as a whole. Can all teachers be like this? Should the onus be entirely on teacher or we as Resource Persons have a responsibility too?
- ✓ Another major limiting factor in developing this understanding was that most of the participants were not teachers and therefore could not relate things to a classroom situation
- One of the major problems that arose time and again was of *management of an activity in a classroom.*

Table 1

Vastu Bujho (Guess what it is?)

Different types of objects will be displayed on the floor of the class room.

Students will be divided into two team with a leader for each one.

Each one of a team will write the name of an object in a piece of paper and will give it to their team leader. The team leader will select one and keep it with him : The leader of the other team will now ask a question (the answer of which will be 'yes' or 'no') to the leader of the opposite team to find out the object - such as:

Q.1. Is it made of wood ?

2. Is it made of Paper ?

3. Is it white ?

4. Is it made of glass ? and so on

The things about which questions are asked will be kept aside. In this way the name of the actual object will come and the last question will be "Is it -----".

For every correct question one point will be given.

For every wrong question one point will be deducted.

The team which could find out the object with least number of attempts (lowest number) will win.

A number of questions relating to the role of the teacher were raised

1. Should the teacher decide the learning objective and the objective becomes the deciding factor for devising an activity? Is it the objective to complete the course or is it to provide the child with an enriching learning experience?
2. Will the teacher's work increase or result in a more productive classroom situation?
3. Does the teacher have to keep on spending time to plan activities and seeing to it that they work all the time?
4. Will the teacher be able to complete the course in the limited time span?
5. Questions were raised on how to write an activity. It was realised that it is not enough to write only the learning outcomes. There is a need to specify what children will do and the challenge to set to them. The question raised was that what will teachers do and how will they tackle this?

There was a lot of discussion and debate on this issues and in the end some common understanding of what an activity is and how an activity is conducted emerged.

How to conduct an activity

We all learnt from the failure of some activities in the classroom situation and realised that while conducting an activity one has to ensure the following:

- An activity has a focus.
- An activity is planned in terms of materials to be used, involvement of children, time management.
- Instructions have to be clear and presented in a manner that the child understands them.
- The teacher should be able to manage the classroom in terms of supervision, grouping, instruction and material.
- Minimum involvement of teacher as 'the teacher' is important.
- Intelligent participation of each and every child is important especially of resistant pupils.
- It may often be useful to analyse and reflect upon an activity.

Understanding that developed

After going through a process of participating in activities themselves, the participants brought out the important role played by activity in the learning process. For example in **Vastu Bujho** (Table 1), the participants clearly brought out what can be learnt from this game e.g. developing power of discrimination, classification and identification etc. Activity is not to be seen simply as a sequence of physical or mental movements but as a *total self sufficient learning process*. It is not something "added" on to a lesson plan but the very central process for creating new knowledge. In terms of the materials, objectives and processes involved, it must match the cognitive level of the learners. Sometimes, reflecting on the activity and its analysis may yield significant learning dividends.

A number of other activities were conducted some specific to a particular subject area to see if activities facilitate the learning process (See Appendix 6 for list of activities). Participants made an attempt to make activities and conduct them.

At the end of the ten days an understanding of the inherent learning process in an activity was developed. It was realised that it is not easy to make activities which will give pleasure to a child. We can make hundreds of activities yet they may not interest the child.

Language

Introduction

In the area of language a number of activities were demonstrated, made, conducted to see and analyse the learning process involved. A lot of questions were raised on the innate potential of the child, on our basic assumptions about the learning process of language and what we wish the child to achieve. After the discussion some clarity and understanding of the child's potential, role of environment and the learning process developed.

Stereotypes

In the sessions held on Language we tried to understand/examine the nature of the child, nature of language, nature of the learning process and the interaction of the child with the environment/context. This process involved tackling a number of set stereotypes generally shared by the participants. They among others included.

1. Child is an empty vessel.
2. Learning is additive and linear.
3. Language learning proceeds listening, Speaking, Reading and Writing.
4. The best way to teach a child how to read is through letter-word-sentence approach.
5. Child always moves from concrete to abstract.
6. There is a difference between language and dialect.
7. Multi lingualism is an obstacle in the learning process.
8. There is only one specific method of writing.
9. Use of fantasy in a classroom situation should be limited.

Understanding the potential of the child

To begin with an attempt was made to study the nature of the child, to see what kind of potential is the child born with? To understand this potential the participants were forced to reflect on the nature/nurture theory. Discussion focussed on whether the child learns everything from the environment or is born with some innate potential. The participants agreed that though environment is fundamentally important, the child is born with some innate potential. Though logically and rationally they saw the point but they had not internalised it which is the reason for the set stereo types they had in their minds.

To understand the nature of the potential of the child an attempt was made to see the kind of rules, knowledge (a two year old) a child has when he speaks a sentence for example

maa	main	khelkar	duudh	piitungaa
mother	I	having played	milk	will drink

(Mother, I will drink milk after I have played.)

The participants were asked what kind of knowledge and linguistic rules a child must have to speak such a sentence. The participants did not immediately appreciate the nature of the question being asked about the grammatical knowledge of the child. But as they reflected over the sentence again and again, they collectively unfolded the wealth of grammatical knowledge of the child: They felt that the child must know

- a) Rules of pronunciation
- b) Hindi i.e. Subject - Object - Verb
- c) Subject verb agreement
- d) Tense in the verb
- e) Invariant nature of *khelkar*
- f) Ability to combine two independent sentences

There are about 50 permutations and combinations possible to convey this message but the child knows the shortest way, child knows "Khelkar" will not be affected by the subject. It was seen how complex language learning is yet at the age of 2 to 2^{1/2} years child is a linguistic adult.

Language as a rule governed system

Several examples were given to show that language is a rule-governed activity. It was highly systematically organized at the levels of sounds, word-formation and sentences.

In the case of English sound system, it was shown that the maximum number of consonantal sounds that could appear at the beginning of an English word was three. In the beginning, participants came up with words, like **psychology** saying that it contained five consonants at its beginning. But they soon realised that this word actually has only one consonantal sound **S** at the beginning. No words with four or more consonantal sounds at the beginning are possible in English. Words, which have three consonantal sounds, at the beginning include:

Strike	Spray	Screw
Stray	Spring	Scrape
Street	Sprang	Scrub

Sound system is so systematically organized that even when 3 consonants are allowed, it is not possible to have any three consonants you like. If an English word has three consonantal sounds, the rule is :

First Consonantal Sound	Only 's'
Second Consonantal Sound	Only 'p', 't' or 'k'
Third Consonantal Sound	Only 'y', 'r', 'l', 'w'

Also every language has similar rules at the level of sounds, words, phrases and sentences. Several issues concerning the relationship between speech and writing also came up in the discussion. It became clear that often there is no one to one correspondence between the written alphabet and the spoken sound.

Table 2

Poem in Malayalam

Kat Kat Kat Kat Kaal Vandi

Kini Kini Kini Kini Saikal Vandi

Pomp Pomp Pomp Pomp Motor Vandi

Zhuk Zhuk Zhuk Zhuk Ti Vandi

In about 25 minutes the participants not only knew the poem by heart but could also identify the sentences, words and alphabets. They were also able to identify the new words that were created.

In the discussion that followed the participants analysed the learning process involved. This activity triggered a major debate Can we use poem to start reading in children? Should the approach be alphabet - word - sentence or poem - sentence- word - alphabet.

The participants felt that though recognition and learning of alphabets is important, there was a consensus on the approach that should be adopted for teaching of alphabets. Importance of going through a process of identifying shapes, sounds, sentences, words and finally alphabets was realised. Also it was seen that rhyme and rhythm play a very important role.

Language and context

But language is not just a set of rules. It creates meaning only in a certain context. Words and sentences may have completely different meanings when used in different contexts. Language can never be acquired independent of the context in which it is used. This is perhaps the most important principle of language teaching. A simple sentence e.g. 'The door is open' may have different meanings depending on the context in which it is used. Consider the following:

	Sentence	Context	Meaning
(a)	The door is open	The door is not bolted from inside and you knock at the door and its person inside says 'The door is open'.	'Please come in'
(b)	The door is open	Two persons inside the room have an argument and the boss says 'The door is open'.	'Get out'
(c)	The door is open	Cold night, Draught is coming from the open door. Nobody wants & get out of the quilt.	'You close the door'

Participants was asked to imagine different contexts for the use e.g. 'The door is open'. They could easily come up with over 20 different meanings of the same sentence.

Importance of a context in language teaching was highlighted in one of the activities in which a poem was used to teach reading (See Table 2).

Language and dialect

The participants felt that there is a difference between language and dialect. They made an attempt to objectively distinguish between language and dialect on the basis of Area, Script, Vocabulary, Purity, Literature, Popularity and Grammar. After bringing out these points the participants made an attempt to objectively reflect on each point of difference. (See Appendix 3& 3A)

After reflecting on each individual point of distinction the group came to an understanding there is no difference between language and dialect but language has certain rules and dialect has certain rules. It was also understood how our understanding of language is governed/influenced by power relations and what goes into standardising a language and giving it the status of a pure, rich language different from a lay man's. This was strengthened by an example sighted by one of the states where dialects are called impure, colochial language and have to be purified.

Conceptual understanding

After a lot of discussion and deliberations the group arrived at an understanding.

- Learning is not additive and linear.
- Child is born with innate potential.
- Child has infinite capacity to explore.
- There is no sharp dividing line between concrete and abstract

- Abstraction of rules comes before rules.
- Text has meaning only in context.
- Multilingualism is an asset.
- Human mind on the one hand has the ability to extract patterns and on the other hand it has the ability to store something unique.
- There is no right/specific age for learning language. Given the right conditions anyone can learn any language at any age.
- Human mind has the ability to handle a large number of languages at the same time.
- There is no difference between language and dialect.
- Child's early years of education must be in his mother tongue.

Mathematics

Introduction

Teaching learning process in mathematics has always been an area in which teachers and children face a number of difficulties. It is generally accepted that mathematics has its own hierarchical structure and should be taught in that order. It is also accepted that this subject is relevant and important for the child's developmental process. Studies have shown the low achievement of children in this subject area and have also gone as far as to say that the teachers conceptual understanding about maths is extremely vague and disjointed. Alternative methods have not been seriously explored and people feel very uncomfortable with the idea of tampering with the traditional mode of teaching that is usually practised. However the traditional approaches have succeeded in creating intense fear among children about mathematics and many children, even in the best of schools, wait for class ten when they can give up mathematics for good. How does one resolve this paradoxical situation: Maths is necessary for the acquisition of knowledge; but children hate and fear maths? Against this backdrop an attempt was made to re-examine what learning of mathematics means. A variety of activities were done specifically in this area to reveal the immense learning that can take place through practical experiences that can actually be enjoyable. Sessions on activities were generally followed up by discussions which primarily bordered on child's cognitive abilities and how maths teaching in actual classroom teaching can adapt to it.

Learning process in mathematics

In the sessions held on mathematics we made an attempt to see what is important in maths learning. This of course meant that we examine what a child already knows and what he needs to know. It also meant that we question the fundamental principles of our teaching process. We were forced to tackle a major stereotype that child does not know and that we teachers have to tell them and explain the mathematical operations.

To arrive at an understanding we together analysed the concept of odd and even numbers and what is important for the child to know the participants divided into groups and discussed which of the given factors, is more important and which is definitely achieved.

- a. child is able to recite the odd/even numbers
or
 - b. child is able to define/explain the method of finding odd/even
or
 - c. child is able to do the mathematical operations involving odd/even numbers
or
 - d. child is able to apply this knowledge to concrete situations.
- In fact the whole issue centred around the question of what was primary: ability to define odd/even numbers or ability to use them in actual situations and operations. After the discussion there was a consensus in the group that the operational part, that is the child being able to do, is more important.

- During the course of the discussion on what is maths learning, participants shared their experiences as children and how this concept was understood and applied by them. The participants realised how these concepts were inadvertently known to them even before the teacher had formally introduced the concepts in the form of a definition. They also recollected how pleasurable the process of rising up to a challenge is when it is applied in the form of a game and the fact that they remembered the process of the game and not the definition clearly brought out that the process is more important than the product. Most of them arrived at the following process which should be followed in teaching odd/even numbers.

- pairing
- naming
- comparing to sets
- connecting it with numbers
- identifying characteristics
- defining

Finally this sequence brought out the crucial point that defining a concept should take the last priority and some of them went as far as to say that definitions were not really important. In another activity it was questioned whether learning should take place through explanation or through practice.

As in the case of language, the actual implementation of rule in practice is definite evidence of the fact that the child has internalised the rule of the concept. He may never be able to articulate it.

An understanding of how an activity (in tambola/mathsie) could be used for initiation, application, enrichment, reinforcement and evaluation was developed. It was also realised that in an activity all of the above may be happening simultaneously but one should not limit the learning process by setting a definite target. Other important features/points that came out after a lot of discussion and deliberation were

- a. consistent involvement of the children and the teacher in the learning process for a longer duration and where the role of the teacher becomes minimal.
- b. time management of the activity in terms of involvement/attention span of the children.
- c. it is important for a child to feel confident about struggling with the problem independently and willingly.

While discussing the concept of counting the participants deliberated on what all a child should know to be able to count. The participants felt that a child should be able to

- identify patterns
- write numbers in a sequence: complete it/correct it

Table 3

Number Matrix

Students will be asked to draw 16 blocks (4/4 square) taking 4 in each line and to write in the blocks any number between 1-9. Any number can be written for more than once.

Now they will be asked to find out '29' from three consecutive numbers in Blocks - by any arithmetical operation.

Such as : $5 \times 7 - 6 = 29$

$5 + (4 \times 6) = 29$ etc.

The student who can make target number of '29's will win.

Instead of '29' any number can be used in the game.

- count concrete objects
- recite numbers
- identify and write randomly presented numbers
- identify larger and smaller, more and less

The participants felt that there is a difference between learning to count orally and learning to count with objects. Some participants felt that children know that counting proceeds in unit addition.

It was discussed why a child learns counting in multiples of tens faster. It was seen that the child recognises different patterns in counting and is able to relate to them. It was felt we need to provide opportunities to the child so that he goes through the process of discovering these patterns. It was also realised that counting is an extremely complex system which has taken several thousand years to develop and we expect our children to learn this complicated system in a very short time.

In a discussion on multiplication tables, participants debated whether conceptual understanding is important or memorisation. After a lot of deliberation there was a consensus in the group that before a child moves on to memorisation he should have conceptual understanding.

The participants discussed whether a child should be told the mathematical operations before hand or should be given opportunities and the freedom to explore, commit mistakes and arrive at his own conclusions. It was realised that generally while arriving at any mathematical concept we generally begin with some predetermined notions that ends up in killing the basic desire to question. As a result the progression of learning in the child is extremely stereotyped and segmented. In an activity called the **number matrix** (Table 3) one of the participants said that before starting the activity she did not know that she could make 45 different combinations to arrive at the answer so it was indeed a challenge and of course a process of joyful discovery for her. She also shared with the group that she was all the time curious as to what combinations others have made and how it was enhancing her learning in the process.

Table 4

EVS

Map

The participants were involved in drawing the map of the classroom. A square was drawn on the blackboard indicating the doors and windows in the classroom. The participants were asked to come on the blackboard and mark the positions of the members sitting in the group. Positions marked on the board were cross-checked by the individual participants. A path was then marked on the board and one of the participants was asked to walk on that path. The route could be simple or complex.

In the analysis the participants brought out the expected competencies.

- Keen observation
- Measuring distances
- Calculating time and distance
- A process of translation of the physical world and abstraction
- Marking relative sizes
- Making approximation and analysis
- Logical inference
- Accuracy
- Balance
- Classification

Table 5

In the candle experiment a candle was kept in a plate with some water covered with a glass tumbler and it was seen that the candle stops burning /extinguishes and the level of water rises. The participants were asked to explain this phenomenon. Upon discussion it was revealed that the rise of water should be equal to the volume of oxygen consumed i.e. it should be $\frac{1}{5}$ th whereas in the experiment it was seen that this basic theoretical premise is being contradicted because the level of water was $\frac{2}{7}$.

Environmental Studies, Science and Social Science

Introduction

Specific Sessions were held to understand the learning processes involved in EVS, Science and Social Science. Activities were done in each area followed by discussion and analysis of the learning process involved.

EVS

Though there is still definitely some lack of clarity as to what we understand by EVS, an understanding of how the environment can facilitate learning did emerge in the Camp. A number of activities were done and deliberated upon. For example discussion on the map activity (Table 4) brought out that in making a map we are trying to reduce a three dimensional reality to a two dimensional picture and we cannot expect the child to understand this abstract concept instantly immediately. Making a map of a room is a step towards understanding this complex concept because the child himself experiences the process of converting reality into a sketch.

A number of other activities were also done to see what in the environment is of child's interests and what kind of learning can take place from the environment.

Science

An attempt was made to see Science as a process of inquiry instead of merely a body of information. This of course meant that we question the present teaching - learning process involved in Science which has very little scope for experimentation. This was done when the participants were involved in a number of activities. For example after the demonstration of the candle experiment (Table 5) it was realised that for ages we have been making the children read this in books but we have never allowed them to experiment whether it actually happens or not. We have never given him the freedom to question the information provided to him. The participant felt that it is essential for the child to go through the process of enquiry himself and arrive at some conclusion.

It was also seen that the notion of absolute accuracy in measurement is a myth and children can arrive at this conclusion by simply experimenting, i.e. going through the process of discovery themselves.

A number of other activities were demonstrated which brought out the importance of experiments in the teaching learning process. It was realised that our present curriculum does not allow a child to experiment and explore on his own.

It became clear that for the progress of Science it is necessary that the results of scientific experiments always remain open for further investigation and it is this spirit of further investigation that we should be able to teach our children.

Table 6

To understand how we can learn through a text which is different from the usual texts, 5 lessons from Eklavya's Social Science text book were analysed by the participants.

Though reluctantly done, the group was able to see the contrast between the book being analysed by them and the books normally used. The difference in the approach used was clearly brought-out by the participants themselves.

- Use of story telling form
- Use of more pictures related to the text
- Questions after every two pages (immediately after discussing a issue)
- Simple presentation of facts
- Systematic way
- Moving from known to unknown
- Self learning process is their
- Other books are too brief and dense and kill the joy of reading.
- Easy approach
- Activity based
- Thought provocation is there.

Presentations

Sharing experiences of D.P.E.P. I states Teacher's training experience of Bihar were shared the participants (Appendix 4A). Problems faced at BRC/CRC level in Assam and Kam (Appendix 4B) were also shared Kerala shared its experience of Text book development.

Special Inputs: Eklavaya shared its observations of the teaching learning process in a class (Appendix 5A). Jean Dreze shared his research findings in Primary education in Bihar, M.P., H.P., (Appendix 5B). Mr. Ajay Mehta, brought to attention of participants one of missing elements in our society "Social Capital" Appendix 5C).

Feedback

In the feed-back session we received both positive and negative feed-back from the participants and some very good suggestions. The participants were grateful to the organising team and the resource persons for organising such an excellent workshop. Most of them enjoyed and were happy about the strategy adopted in the workshop, of not making the objectives of these activities clear in the beginning. They felt that their notion of activity was completely transformed and the activities done here were very useful and would be a great help in their respective states. They liked the informal mode of interaction of resource persons and this helped in strengthening their belief that activity method could work.

They were glad that they deliberated on various issues with the participants and the resource persons and felt enriched. They learnt new things about language learning but were not clear as to how to implement them. Some of them were very appreciative of the strategy of creating confusion followed by Brain storming and then allowing the participants to draw-out their own conclusion. They felt that now they have some clarity of what an activity means and the credit goes to the fact that they were made to go through the process. They also felt that the visioning has given them some direction as to how to proceed. One of the state teams expressed their feelings about the whole workshop in just one sentence by saying "Little is taught and a lot is learnt here".

All the states expressed their displeasure about the selection of participants by the State for this workshop. They said that some of the members who have nothing to do with education have been sent to attend this workshop. Secondly the objectives of this workshop was not told to them. They came here totally unprepared. Had they known, they could have got relevant material and textbooks from their states and could have shared each others views and opinions on it. Some participants were very unhappy with the approach of not giving any solution to them. There were others who felt that there was a lot of communication gap between the resource persons and the state teams.

Suggestions

- a) Duration of the workshop should not be more than 5 or 6 days.
- b) The workshop should always start after 6th of the month (first is the pay day).
- c) More recreation time should be given.
- d) The questions on Needs of the State should have been sent to the state.
- e) A paper should be circulated at the end of the every day stating the consensus arrived at on various issues.
- f) Some teachers from each states should be invited to attend such a workshop because they are the one's working directly with children.
- g) A similar workshop should be organised for state project director's, secretary education, so that a concrete input is made in primary education programme.
- h) This workshop should have been done in two spells.
- i) A paper giving the background information should be provided on the first day.

Planning

In order to make the first national resource camp (NRC) effective and responsive to the needs of the States, the core team met two days before the camp was to begin. A tentative plan was prepared from 3rd to 12th of February (See Appendix 1A).

Total Number of sessions in each area was decided as follows.

Area	No. of sessions (including Consolidation)
Activity	10
Language	6
Maths	6
EVS	3
Children's learning process	3
Others	19

Activity

During the first three days the participants and the resource persons would be involved in making, presenting, conducting and analysing activities with and without materials from outside.

The attempt will be to understand what we mean by an activity and how it can be used for effective curricular transaction.

Maths/Language/EVS

An attempt would be made to understand the nature of the learning process involved in each of them by specifically seeing the learning that takes place through activities in each area.

Others

- Library sessions 2
- Week's time table 3 (including sharing)
- Discussion/planning 1
- for state Resource Camp
- Feedback to future plan 1
- Special Inputs
 1. Primary Education (Jean Dreze)
 2. Prashika (Hardy Venu)

3. Social Capital

(Ajay Mehta)

4. Science Teaching
Programme/Social Science

(Kamal Hardy)

• Sharing the experience of D.P.E.P. I States

1. Assam / Karnataka

BRC/CRC

(Shalu/Ganesh/Subrata)

2. Bihar

BEP training

(Julian and Jeevan)

3. Kerala

Textbooks

(Unnikrishnan Balakrishnan)

Training

(Mohan/Balakrishnan)

• Open Sessions

• Compilation of State Documents

• Informal Sessions

1. Balti Ball Match

2. Cultural interaction between states.

It was decided to have about four sessions during the day of approximately two hours each and one informal session in the evening. A daily programme was also chalked out. Possible issues and kind of activities that could facilitate in developing an understanding of the learning process in language, maths and EVS were discussed. Papers and books that could facilitate in the workshop were selected and the decision to prepare the display room was taken.

Total number of participants were to be divided into two groups by asking each states to divide into half. The groups would be called group A and group B. It was decided to provide the participants with the following :

- File (papers and pen).
- Programme
- Library card
- Map of the Campus
- Reading Material

Decisions were taken regarding seating arrangements, venues, materials and certain rules that would apply to the workshop (see appendix). It was also decided to hold a review meeting at the end of each day.

It was decided that internal division of the group would be done randomly, the group leader/representative to conduct the activity would be selected by Lottery system

Tentative Programme

Time	3-2-97	4-2-97	5-2-97	6-2-1997	7-2-97	8-2-97	9-2-97	10-2-97	11-2-97	12-2-97
9 a.m. to 11 p.m.	<ul style="list-style-type: none"> Registration Introduction Ground Rules 	Activities	Activity (What can be done with material)	Children's learning	Special Inputs	EVS	Language	EVS	EVS	Consolidation of EVS Children Progress
11:30 to 1:30 p.m.	Activities	Special Inputs	Activity	Maths	Maths	Language	Maths/	Developing	Consolidation of language learning	Discussion state resource camps
2:30 to 4:00	Activities	Activity with one material	Activity	Children's learning Process	Maths Activity	Language	Maths	Language	Consolidation maths	Feedback
4:15 to 5:30	Childhood games & Activities	Making Activities & Presenting	Activity (consolidation and what is a good activity?)	-----	Weeks time table	Library session II	Weeks time table	Language	Sharing of ideas in status	-----
8:30 to 9:30	Informal Session	D.P.E.P.I. Presentation.	D.P.E.P.I. Presentation	Open session 2 groups	D.P.E.P.I. Presentation	Special Inputs	Special Inputs	Special Inputs	-----	-----

Appendix - 2

Programme

Sessions*	3.2.1997	4.2.1997	5.2.1997	6.2.1997	7.2.1997	8.2.1997	9.2.1997	10.2.1997	11.2.1997	12.2.1997
I	<ul style="list-style-type: none"> • Introduction • ground rules • objectives 	<ul style="list-style-type: none"> • Primary Education in India <p>(Jean Dreze)</p>	<ul style="list-style-type: none"> • Activities involving different mathematical operations ARP, Tambola/ ARP, Housie, Drawing with shapes 	<ul style="list-style-type: none"> • Presentation of activities • Analysis 	<p>Making activities to initiate/enhance reading skills for different classes</p>	<p>Understanding the importance of context and of giving freedom to the child ARP Antakshani chair activity</p>	<p>Understanding the learning process involved in counting</p>	<p>Developing an understanding that there is no difference between language and dialect</p>	<p>Activities on science (understanding that it is a process of enquiry)</p> <p>ARP -</p> <ol style="list-style-type: none"> measurement candle experiment leave falling of heavier & lighter use of kushi kushi 	<p>Presentation of approach papers on child learning process (West Bengal)</p> <p>Language (Orissa)</p> <p>Maths (Gujarat)</p> <p>EVS (HP) discussion.</p>
II	<ul style="list-style-type: none"> • Individual state needs • group discussion 	<p>Understanding the use of material from environment in the learning process.</p>	<p>Understanding the learning that takes place through simple activities Vastu Bujho, ARP</p>	<p>Understanding what we mean by maths learning.</p>	<p>Presentation and analysis of activities.</p> <p>ARP - Use of poem to teach reading.</p>	<p>Reading Excerpt from 'teacher' by Sylvia Ashton</p> <ul style="list-style-type: none"> • discussion • analysis • understanding the emotional relationship the child has with each learning experience 	<p>Why a child needs to go through the process - ARP - map activity</p>		<p>Importance of environment learning</p>	<p>Presentation of follow-up and discussion.</p>

Sessions*	3.2.1997	4.2.1997	5.2.1997	6.2.1997	7.2.1997	8.2.1997	9.2.1997	10.2.1997	11.2.1997	12.2.1997
III	Activities (used for enriching vocabulary and learning to discriminate and identify) ARP - Sab ki kavita, bol bhai kitne bol, pholam phalam sabjium	Making activities Presenting/ conducting activities ↓	Making activities for different levels in specific areas using the given materials. ↓	ARP - Science Activities (scale) • Discussion • analysis	Understanding the limitations of using alphabet - word - sentence approach in the learning process by comparing poem to the card activity	Understanding the nature of potential of the child and learning process.	Understanding a 3 dimensional concept by going through the process.	State groups documentation ↓	Group task ↓	Feedback ↓
IV	• Reflecting and listing of childhood games. • Analysing the learning process in valued	• Analysing • Discussion on why so much activity?	• Presentati on of activities • analysis • drawing out the characteristics of a good activity	Understandi ng the process involved and child ability draw his own inferences ARP - Mathsie	Sight seeing	Special input social capital (Ajay Mehta)	-----	State group documentation	Group task	-----
V	Balti Ball Match	DPEP I BEP Teacher's training	DPEP BRC/CRC Assam/ Karnataka	Eklavya Teacher's training	-----	-----	-----	DPEP I presentation (Textbook development - Kerala)	Inter-state cultural interaction	

Sessions * - I = 9 am to 11 am

II = 11:30 to 1:30 p.m.

III = 2:30 to 4:00 p.m.

IV = 4 15 to 5:30 p.m

V = 8 30 to 9:30 p.m

ARP - Activities done by Resource Persons

↓ - Shows that both the sessions were inter-linked

Daily Programme

Morning Tea	:	6:30 A.M.
Breakfast	:	7:45 A.M. - 8:30 A.M.
General Assembly	:	9:00 A.M.
Ist Session	:	9:15 A.M.
Tea Break	:	11:15 A.M. - 11:30 A.M.
IIInd Session	:	11:30 A.M.
Lunch	:	1:30 P.M. - 2:15 P.M.
IIIrd Session	:	2:30 P.M.
Tea Break	:	4:00 P.M. - 4:15 P.M.
IVth Session	:	4:15 P.M. - 5:30 P.M.
Dinner	:	7:30 P.M. - 8:15 P.M.
Informal Session/Presentation	:	8:30 P.M.

Debate (Language and Dialect)

The participants felt that there is a difference between language and dialect. They made an attempt to objectively distinguish language and dialect on the basis of the following:-

- Area** : : The participants felt language is spoken over a larger area as compared to dialect which is spoken in small regions.
- Script** : : Language has a script but dialect does not.
- Vocabulary** : : Language has a larger stock of vocabulary as compared to dialect.
- Purity** : : Language is definitely purer than dialect.
- Literature** : : Language has literature and dialect does not.
- Popularity** : : Language is more popular than dialect.
- Grammar** : : Language has grammar and dialect does not.
- Machine,** : : Language is the mother, dialect is the daughter.
- Less variation** : : Language has less variation than Dialect.

After bringing out these points the participants made an attempt to objectively reflect on each point of difference. The discussion revealed that the standard language for example Hindi is only spoken in pockets of northern India only.

It was realised that script has nothing to do with language. Any language can be written in any script and all languages can be written in one script. Script came several thousand years after language. Also if we look at Awadhi, Bhojpur, which are the so called dialects we see that they have much richer literature as compared to Hindi and they are the mothers rather than daughter then Hindi.

There was a open discussion on whether vocabulary of Ramayana, written in Awadhi is richer or Hindi is richer. The point was well taken that dialects have equally rich vocabulary. Also it was felt that a distinction cannot be made on the basis of grammar because a similar wealth of grammar exists in all the languages we cannot say that a Hindi sentence has more grammar than a Gujarati sentence.

A distinction was being made on the basis purity and mother-daughter relationship in terms of which is older. The discussion revealed that Awadhi, Persian, Urdu are much older than Hindi and are the mother of Hindi. South Indian languages have nothing to do with Sanskrit even though it is propagated otherwise. Tamil has some words of Sanskrit but its roots are not in Sanskrit.

Hindi also has words from Portuguese like Balti, from China like Rickshaw. Yet we are influenced by this concept of purity that we try to make our Hindi grammar like Sanskrit by introducing the concept of Karta's.

It was also brought out that through propoganda we have been made to believe that Hindi is more popular and over a wider region but this is not true because it is only spoken in pockets of our country.

After reflecting on each individual point of distinction the group came to an understanding there is no difference between language and dialect but language has certain rules and dialect has certain rules. It was also understood how our (understanding language of language) is governed/influenced by power relations and what goes into standardising a language and giving it the status of a pure, rich language different from a lay man's. This was strengthened by an example sighted by one of the states where dialects are called impure, collochial language and have to be purified.

Politics of Language or Language of Politics

The discussion about language and dialect made it clear that the distinction between the two was essentially socio-political rather than linguistic. In fact, for a very long time, people in power have perpetuated the association between a 'standard and pure' languages and high intellectual abilities. The colonial rulers mostly came from monolingual backgrounds. For them the equation

One region = one nation = one people = one language seemed unstable and absolutely necessary for social development. So we had France = French people = French language

Britain = British people = English language etc. British colonizers were baffled when they came to multilingual countries like India where such equations did not have any meaning. It was impossible to formulate such an equation

India = Indian People = we can only say Indian languages

Multilingualism was immediately seen as a headache and a problem. The picture however has changed radically with decolonization and a greater part of the world becoming increasingly multilingual. Recent research has shown that multilingual children actually do better at school, and in society as they have greater cognitive flexibility and richer linguistic and cultural experience.

Another discussion on the constitutional status of English and Hindi revealed that because of propaganda and attempts at building public opinion in certain way we are made to believe that Hindi is a national language and English is one link language where as according to the constitution Hindi is the official language and English is the associate language (up till 1964). We are also made to believe that there is a difference between language and Dialect (discussed separately) and the standardised language is the purest. Yet when the group deliberated upon these issues it became clear that there is no difference between language and dialect and the standard language is not the purest. The group analysed the process that a language has to go through to become standardised and come to a conclusion that a lay man's language cannot become standardised for they will never have money to make a dictionary or write grammar, etc. Only those in power have the control over financial sources/finances required to standardise a language.

Even child's entry into school is determined by the society, power structure, education of parents and the relationship between these four.

Mother-daughter relationship depends upon the power structure.

Bihar Education Project

Teacher Training in Bihar

One of the objectives of teacher's training is to identify potential trainers among the participants so that the entire training programme can be taken up by them. Thus the attempt is to make the community self sufficient to deal with its problems. This then followed by a slow withdrawal from that community. The philosophy of whole project is based on the fundamental principles of community development.

It was shared that training cannot be considered an isolated event, it has to be done in context of a project. It is a part of process and keeping the Bihar situation specifically in mind the training module has three important features

- (a) Sensitisation
- (b) Class room interaction
- (c) Planning (Structure of CRC/BRC etc.)

The training programme goes through the following phases

- (a) Rapport Building (i.e. building relationships)
- (b) Brainstorming what is education)
 - (*) Points mentioned by the teachers are noted on the Board.
- (c) Group discussion

This involved taking stock of teacher's perceptions of what education means to a Land labourer, to a poor farmer, to a middle class man & to a business man, of how a educated child is seen by the rest of the family. This generally leads to a discussion on gender issues and socio economic scenario of our country.

Needs and problems of teachers were also discussed.

Role Play

- (d) All the perceptions are listed out and role play is done of the outcome of discussion. This is followed by a effective analysis of 'our' community's perception of education.

This sensitisation is done over a period of 3-4 days.

Class room interaction

An attempt is made to replace teaching by learning. Teacher takes the role of a facilitator. learning through text, TLM, Activities an attempt is made to set a challenging task, facilitate creating an environment where everyone thinks/works.

Training Structure

- All B.E.P. personal is trained including the electrical personnel.
- A batch of 35 teachers is trained in 10 days.
- Potential trainers amongst the teachers are identified during the training programme.
- These teachers conduct training programmes (5-6 rounds) for some time & then go back to teaching & other teacher's take the role of trainees.
- These are potential CRC co-ordinators.
- Regular visits are made by BEP team.
- 3 trainers for every training programme.
- Facilitators/trainers actually study school situation
- modifications in modules

Teachers training is supported by

- BEP personnel
- education departments personnel (DSE/AEO/BEOs)
- training of trainers
- BRC/CRCC training (BRCC & CRCC are on rotational basis - six months).

Inputs

- Mahila Samakhya
- NFE
- VEC

As a result of the training punctuality and attendance has improved but we do not see much impact on the classroom transaction. The discussion revealed that it is important to have trust on teachers.

Karnataka Presentation on the BRCC Experience

A resource person from Karnataka shared his experiences as a BRCC and the trials and tribulations that he had to undergo while performing the duties of a sub-district functionary strictly according to his job-chart.

He narrated a very realistic account of his experiences with the BEEOs and state government Functionaries and the conditions under which he had to work.

The role of a BRCC apart from doing routine administrative work dumped on him from BEEO is also of visiting clusters and providing support to the CRCCs and teachers. After a workshop based on examining pedagogical issues it was decided that every BRCC would stay at a school for a month and teach the children of that particular school. The kind of difficulties the BRCC faced were traumatising for them and then they realised that whatever they trained teachers for was absolutely irrelevant for them. Their training package did not equip the teachers to handle even one of the classroom problems. This gross contradiction became amply clear to them when they faced the situation themselves.

It was revealed that these kinds of exercises should be conducted regularly so that the trainees can easily adapt to the conditions existing in the classroom. The participants also asked the Karnataka representative to articulate the administrative problems and ways of dealing with them. To this his response was that without the support of the administrative heads it is not possible but ways of appearing them about the kind of work that is possible in the field and its importance can solve problems to some extent.

Assam DPEP - Presentation on its BRCs & CRCs.

The presentation made by the D.P.E.P. Assam team brought out some of the fundamental issues that had been plaguing the sub-district structures and their functioning. Assam shared with the participants the entire process whereby they evolved the functioning of their sub-district structures and the problems that they are still facing.

The participants were concerned about the relationship between the BRCC and State Level Educational functionaries because the non-DPEP officers are not oriented acquainted with the objectives of D.P.E.P. and they generally pose obstacles in the normal functioning of the BRCs and CRCs. The Assam representatives explained to them the concept of project clusters and the need to constantly try various approaches and to identify enthusiastic BRCs who would be willing to take on the challenge of qualitatively improving the level of academic inputs provided to the CRCs teachers despite prevailing administrative problems. They reiterated the need to expose the state government educational functionaries, like, BEEO, SDI's etc. to the school situation and CRC BRC meetings in non-supervisory non-inspectorial mode. An in-service orientation on basic pedagogical issues for them is also mandatory.

The job chart of the BRCs & CRCs was also discussed at length and the nature of work thrust on them that is purely non-academic and has no bearing what so-ever on the academic inputs that they are supposed to provide. They are also questioned by the teachers about the fact that they have no authority to solve their problems like payment of salaries signing of acc

registers etc. therefore they were not willing to concentrate on issues like difficulties in teaching maths or problems regarding teachers and their transaction in the classroom. Hence academic issues suffered.

The whole gamut of a sub-district functionary and his resource team were discussed and also what should be the minimum expectation from them considering the situation existing in the field. Realistic planning and consistent on-site support for the BRCs from the state and from the sub-district structures in terms of academic inputs emerged as the two big issues as a result of the discussion.

trials and
functionar

state gov

m, from th
ers. After
ould stay
culties th
trained th
the teach
ply clear

the traini
asked th
ealing wi
ds it is n
field and

ental issu
ed with t
sub-distr

State lev
ed with t
of the BR
ers and
or would
nputs to
iterated
etc. to
. An im

work tha
be acad
but the
of acco

Observations on the Teaching Learning Process

Eklavya shared some of its observations of the teaching learning process in the classroom situation. They saw -

- (a) It was observed that in a classroom a teacher is generally addressing the bright children only who already know a lot. As a result in reality no learning takes place in a classroom situation.
- (b) It was seen that Subtle strategies on part of children satisfies the teacher.
- (c) It was seen that children in a classroom read books without looking at them or were reading by holding the book upside down.
- (d) Forming a word was difficult for children.
- (e) To the surprise of the teacher, children were extremely creative when the text and materials were to their liking and they were given the freedom to explore.

Some observations were made on the teachers attitude in the training programmes and classroom

- Teachers were hesitant and could not feel free.
- Teachers did not spontaneously participate in the activities.
- Teachers had biased attitude towards social and economic status of children.
- Teachers were also crushed by the system (too much administrative responsibility etc.).

It was felt that it is important that the teachers realise what a child can do. It is imperative to understand the process with which the child arrives at a answer. To do so it is important that the teachers themselves experience the process of learning and the challenge involved in doing activities. Activities were followed by discussion in the areas of language, maths and EVS. This generally results in breaking the inhibitions & developing an understanding of the learning process.

A lot of discussion was generated. Participants wanted to know the kind of follow-up and monitoring that is taken up after the teachers training programme. In response they were informed that a three day training programme is done later in the year. Also monthly meetings take place regularly. It was also shared with the participants that the word monitoring is no longer used by Eklavya because it is felt that the whole purpose is to support the teacher rather than keep a check on him. There are Resource Persons (Teachers) who visit schools to give support. The school teachers share their problems with these Resource Persons. A joint attempt is made to set-up problem by conducting and demonstrating activities. The total time period (1986-1996) of the project was also discussed and questions were raised on the kind of appraisal that has been done till now. It was then shared that the formal appraisal has been done by the state but the report is ambiguous that is it is not clear whether it good or bad. Attitudes of teacher was also discussed and it was shared that most of the teachers who have come in contact with Eklavya are found to be creative if adequate opportunities are given. Participants also discussed the logistics of different training programme and different kind of packages. Yet the results are not very

encouraging. Questions were raised on MLL implementation and why in spite of that the baseline studies are poor.

It was realised that over the last ten years there has been a tremendous change in the education circle. Today activity is accepted as a part of the classroom whereas in 1986 it was not. At that time very few people understood the concept of activity based classroom. Today there is an attempt to understand what we mean by learning process in language, maths and EVS. We are trying to redefine learning and are beginning to accept the infinite ability of the child to explore and his innate potential. In Eklavya the stress was not on highlighting the errors committed by the child but to use them to stimulate learning. The teacher's attitude and behaviour also changed. It was seen that in comparison to a teacher who is restricted, a teacher who is given freedom succeeds more.

In spite of the fact that the whole administration, people in the educational circle and we together are making an attempt to bring a change, we are still far from what we understand holistic education. The more we have talked about quality of education further away we have gone. It was realised that it is important to have less of administration and more of freedom and power to the teacher.

Eklavya shared some of its observations of the teaching learning process in the classroom situation. They saw -

- (a) It was observed that in a classroom a teacher is generally addressing the bright children who already know a lot. As a result in reality no learning takes place in a classroom situation.
- (b) It was seen that subtle strategies on part of children satisfies the teacher.
- (c) It was seen that children in a classroom read books without looking at them or were reading by holding the book upside down.
- (d) Forming a word was difficult for children.
- (e) To the surprise of the teacher, children were extremely creative when the text and materials were to their liking and they were given the freedom to explore.

Some observations were made on the teachers' attitude in the training programmes and classroom.

- Teachers were hesitant and could not feel free.
- Teachers did not spontaneously participate in the activities.
- Teachers had a biased attitude towards social and economic status of children.
- Teachers were also crushed by the system (too much administrative responsibility etc.).

It was felt that it is important that the teachers realise what a child can do. It is imperative to understand the process with which the child arrives at an answer. To do so it is important that the teachers themselves experience the process of learning and the challenge involved in the activities. Activities were followed by discussion in the areas of language, maths and EVS. This generally results in breaking the inhibitions & developing an understanding of the learning process.

A lot of discussion was generated. Participants wanted to know the kind of follow-up monitoring that is taken up for the teachers' training programme. In response they were informed that a three-day training programme is done later in the year. Also monthly meetings

take place regularly. It was also shared with the participants that the word monitoring is no longer used by Eklavya because it is felt that the whole purpose is to support the teacher rather than keep a check on him. There are Resource Persons (Teachers) who visit schools to give support. The school teachers share their problems with these Resource Persons. A joint attempt is made to set-up problem by conducting and demonstrating activities. The total time period (1986-1996) of the project was also discussed and questions were raised on the kind of appraisal that has been done till now. It was then shared that the formal appraisal has been done by the state but the report is ambiguous that is it is not clear whether it good or bad. Attitudes of teacher was also discussed and it was shared that most of the teachers who have come in contact with Eklavya are found to be creative if adequate opportunities are given. Participants also discussed the logistics of different training programmes and different kind of packages. Yet the results are not very encouraging. Questions were raised on MLL implementation and why in spite of that the base line studies are poor.

It was realised that over the last ten years there has been a tremendous change in the educational circle. Today activity is accepted as a part of the classroom whereas in 1986 it was not. At that time very few people understood the concept of activity based classroom. Today there is an attempt to understand what we mean by learning process in language, maths and EVS. We are trying to redefine learning and are beginning to accept the infinite ability of the child to explore and his innate potential. In Eklavya the stress was not on highlighting the errors committed by the child but to use them to stimulate learning. The teacher's attitude and behaviour also changed. It was seen that in comparison to a teacher who is restricted, a teacher who is given freedom succeeds more.

In spite of the fact that the whole administration, people in the educational circle and we all together are making an attempt to bring a change, we are still far of from what we understand as holistic education. The more we have talked about quality of education further away we have gone. It was realised that it is important to have less of administration and more of freedom and power to the teacher.

Primary Education in India

Jean Dreze shared his perceptions on the situation of Primary education in India. He brought our attention to some facts like

- (a) Only 10% of our rural population has studied up to class VIII
- (b) A large section of population in states like Bihar and U.P. is outside the school system.
- (c) According to our constitution everybody up to the age of 14 years should be educated and we have not achieved it.
- (d) Unequal ratio of highly educated and illiterate. He shared that Education is not only an important factor in the economic development but it is today considered a value in itself (in terms of quality of life), Human capital, it has instrumental role (fulfilment of personal needs). He also pointed out that today links between parental education and child's health have been established. Also education plays an instrumental social role. He was then making an attempt to explain that education in itself has some intrinsic value.

He then went on to highlight the inadequacies of the (school) systems in India.

- Low budgeting on education
- Uneven teacher pupil ratio (1: 68 children)
- According to 1966 survey 2/3rd of the schools have just one or two teachers
- Half the schools in U.P. and Bihar lack the essential requisites of a school.
- Absence of a reform - movement.

He shared his research findings with the group. On exploring the cause of advance basic education in children in Bihar, UP, MP, HP he found out that low level of education of parents, low quality of schools and teaching are a major cause of drop out. Poverty though a co-related factor has been exaggerated. Also according to his study child labour is not the cause of drop out, whereas the concept of non-formal education centres is based on the assumption that child labour contributes majority to the drop out rate. He also made a reference to the mid day meal scheme and Valion scheme and said that though enrollment is there, sustaining the interest of child becomes a major problem.

He shared his positive experiences of H.P. He tried to explain the reasons for universalisation of primary education as follows

- People accept school as a normal part of life.
- High motivation of parents
- High motivation of teachers
- Positive relations between teachers and parents.

Appendix - 5B

- Less of gender bias
- School holidays to suit the agricultural calendar.

After Jean Drey shared his experiences with the group, there was a lot of discussion on the reason for success in H.P. It was also brought out that student teacher ratio in HP is atleast 40:1.

States shared there experiences of non-formal education centres, bringing out the lack of facilities with the incharge, lack of materials, infrastructure, low motivation. The fact the school a larger institution could not retain the child then now can a NFE centre do so, was brought out clearly.

Also the concept of mid day meal was questioned. One of the States pointed out that the school has no infrastructure or personnel to cook meals and it becomes difficult. Also at times the unleguity/honesty of the teachers and principal is questioned and sometimes he is called as a thief.

The participants also shared the problem of migration. They expressed there helplessness that at times they are at loss, when the child comes back to the school after six months. They also referred to the manipulation of records to suit the need especially in case of enrollment and drop out. One of the recourse persons pointed out that most of findings were already know, the important thing is to move on from there, to create awareness and an attempt to make the whole system respond to the need. There was consensus in the group that now we need to have a movement to handle this major problem at hand.

Social Capital

Mr. Ajay Mehta discussed the importance of human capital with the participants. By social capital he meant the relationships that exist between people (trust) formed by horizontal ties and are not vertically determined. It has been found that spirit of co-operation and mutual trust results in better performance of a state. He sighted an example of Robert Putner's study in 1970 in which an attempt has been made to explore the reasons for success of North Italy as compared to South Italy. It was seen that high density of civic association correlated positively with superior performance in north Italy. In our own country in Kerala human development indicators are high as compared to other States which perhaps explain the reasons for its success.

He said that this social capital is missing in our society. HE went on to facilitate this with a number of examples referring to the system of taking bribes, the patron relationship, corrupt leadership of the poor.

He said that NGO too cant do much, and we should not expect them to create social capital and provide the society with readymade solutions the NGOs are constituted of middle class people who are faced with there own problems.

He said that there is a need for developing a spirit of co-operation among the people to bring about any change. Also there is a need for transparency in relationships. He also referred to the importance of creating strengths at the village level i.e. relocating authority/power.

He sighted a number of examples from Seva Mandir how an attempt was made to try and change relationship in a village by creating Para workers.

The participants agreed that there is a lack of individual dedication and commitment, This is true at the govt. level also. They felt that in case of NGOs sincere work is seen if one individual is dedicated and as soon as that individual goes away, the performance of NGO goes down.

The participants wanted to know whether teacher's were motivated in the Seva Mandir Project After discussion it was realised that if the community shows interest and there exists a general spirit of co-operation then, teachers participate whole heartedly. He said that there is a need for developing a spirit of co-operation among the people to bring about any change.

List of Activities

1. Mapping

The students will draw the map of the classroom. A square was drawn on the blackboard indicating the doors and windows in the classroom. The participants were asked to come on the blackboard and mark the positions of the members sitting in the group. Positions marked on the board were cross-checked by the individual participants. A path was then marked on the board and one of the participants was asked to walk on that path. The route could be simple or complex.

In this way he can put any thing in any position inside the room, outside the room or nearly the room and will show the position on the sketch. The children will search and discover.

2. Word Making

Description :- The activity can be constructed in graded difficulties for different classes.

For class I :- words may be limited in 3 alphabets

E.g. etc.

For class II :- words may be limited into 4 alphabets and be categorised into Name, Place name, Flower, Tree etc.

For class III :- words may be limited into 4 to 5 alphabets and may be opened for any subject.

One student will speak out any one word. The new boy will catch the last alphabet and speak out another word using the last alphabet as first. If one cannot speak in a given time limit (say up to a count of 5) he will lose one point. Succeeding in speak the word in a given time limit will bring one point in favour.

Time for response may be arranged suitably

3. Language Game (Antakshani)

All the students will sit in a circle. One will begin by saying a word. Next to him should say a word beginning with the last letter/sound of the word said by previous child. The next child will do the same and the game will go on. Some words should not be repeated. Any one who has to say a word will be out of the game. The difficulty level may be increased by asking them to say two/three /four letter word and also to write the words.

4. See and Tell (Fan/Chair Activity)

Example : A chair (or any suitable object) will be placed in the class. The students will be asked to tell one. By one as many new sentences as possible in connection with the chair by seeing it. The same sentence should not be repeated. The game will continue for several rounds. In the higher classes the students may be asked to write the sentences.

(1) 1 Horizontal line

(2) 2nd Horizontal line

(3) 3rd Horizontal line

- (4) 4th Horizontal line
- (5) All 4 corners
- (6) All the numbers Diagonally
- (7) House Full.

5. Find the number

The game will be played in groups. One of the group will write a number between 1 - 99 and hide it. Another will put questions to the former to find out the number, Such as

Questions	Probable answer
1. Is it between 75-99	No
2. Is it below 50	Yes
3. Is it a multiple of 3	Yes
4. Is it an even number etc.	Yes

on till the number is identified. The last question will be -- Then it is ---. After the number has been found out, both the children will reverse their part. After his completion another pair of students will play the game.. The student who can identify the number with least questions will win.

6. Number Matrix

Students will be asked to draw 16 blocks taking 4 in each line and to write in the blocks any number between 1-9. Any number can be written for more than once.

Now they will be asked to find out '29' from three consecutive numbers in Blocks - by any arithmetical operation

Such as : $5 \times 7 - 6 = 29$

$$5 + (4 \times 6) = 29 \text{ etc.}$$

The student who can make target number of '29's will win.

Instead of '29' any number can be used in the game.

7. Vastu Bujho (What is the thing)

Different types of objects will be displayed on the floor of the class room.

Students will be divided into two team with a leader for each one.

Each one of a team will write the name of an object in a piece of paper and will give it to their team leader. The team leader will select one keep it with him : The teacher of the other team will now ask a question (the answer of which will be 'yes' or 'no') to the leader of the opposite team to find out the object - such as

Q.1. Is that thing is made of wood ?

2. Is that thing is made of Paper ?

3. Is it white ?

4. Is it made of glass ? and so on

The things about which questions are made will be kept aside. In this way the name of the actual object will come and the last question will be "Is it -----".

For every correct question one point will be given.

For wrong question one point will be deducted.

The team which could find out the object with lowest attempt (lowest number) will win.

8. Phulam, Phalam, Sabjiyam (Flower, Fruits, Vegetable)

All the students in the class should sit in a circle. One will come in the centre with a board/book on his head. He will act as a hawker, calling " Phulam, Phulam, Sabjiyam. " He will travel inside the circle and tell Phulam or Phalam or Sabjiyam" to any of the student. The student should tell the name of what ever the hawkers asks without losing time. If he can tell the name the hawker should go to another student and repeat the same activity. If any student fails to name the object immediately, he will go to act as a hawker and the hawker will sit in his place. The name of flower/fruit/vegetable.

9. Housie

Draw a 4x4 square To write any number between 0 - 99 in those blocks without repetition.

To cut the numbers as per given clues by the teacher

(i) Cut the odd numbers between 20 -30

(ii) Cut the number 4 multiplied by 6

(iii) Cut square of 7 etc.

(iv) Cut the number which is equal to 2×3^2 and so on

The student who may first complete cutting the numbers in carry one of the following arrangements will be encouraged by putting his name on the black board.

10. Bag Activity

This is in the form of a puzzle school bag is drawn in the centre surrounded by various untouchable items. One has to mark the objects that a child would normally in put a school bag.

11. Leaves

Students are asked to collect two exactly similar leaves from the environment. In the class room a number of things in the leaves are compared by the students for example serration, length, colour, etc. Followed by a discussion as to whether we can have to exactly similar things or not.

12. Balls

Take two balls one heavy and one light. Throw both the balls from a height. Build a discussion in the class room as to which falls first to the earth.

13. Measurement

Ask the students to measure any thing for example length of the board. Compare the results of the students. Follow it up with a discussion as to whether we can have accurate measure of any thing or not.

14. Sab ki Kavita

15. Drawing with shapes

Three or four shapes like triangle, square, oval etc. are given and the students are asked to use them to make different figures. The game can be made more complex by telling them to use all the shapes in one figure.

16. Scale Activity

Use a 60 centimetre scale. Divide the children's into groups. Ask each group to i) to try and bring fingers to centre ii) move one finger keeping the other stationary at one end iii) to keep the two fingers at the ends of the scale and see the centre sagging. Follow it up with the discussion (ask why? at every point).

17. Card Activity

All the students are divided into groups and cards are given to them (each cards has either a word written on it or a picture is drawn on it). One group is asked to say sentence on the basis of the card in their hand. The other group is asked to link with the spoken sentence and card with them and speak another sentence. The process continues and a story is made and written on board.

18. Pep up Activities

A number of activities were done during each day to revive the interest of the participants and to make them feel fresh. Few examples of such activities are

- **In the pond on the bank** - All the boys/girls will stand in a circle with one in the centre. The circle where the boys/girls stand is the bank of pond, which is the area encircled by them. When the student in the centre shout ' In the Pond', all the boys/girls will have to jump forward in the 'Pond'. If he again shouts 'In the pond' now will jump, because they are already in the pond. If he shouts "on the Bank" all have to jump backwards to reach the 'Bank: If any one fails to follow the direction he will be drowned in the pond, i.e. He will be out of the game and will sit in the centre.
- **Dal Bandho (To form Groups)**- The students will be asked to move in a circle. When the teacher tells a number, such as '5' the students have to quickly make groups of 5, if any one fails to enter a group of 5 then he is out and will have to conduct the game.
- **Kya hai kala kya hai safed** -

Resource Persons

Mr. Ajay Mehta
Seva Mandir
Udaipur - 313 001

Mr. Balakrishnan
Programme Officer
DPEP Kasargod
Near AEO's Office
Kasargod, Kerala
Ph: 0499-521546

Sh. Dhir Jhingran
Deputy Secretary
Department of Education
Room 502 - B
Fifth Floor, C-Wing
Shastri Bhawan
New Delhi - 110 001
Ph: 3388632 (OFF)

Mr. Ganesh
Resource Person
DPEP Karnataka
State Resource centre
501, Chitrabanu Road,
Kuvempunagar, Mysore

Dr. Hriday Kant Dewan
Vidya Bhawan Society
Udaipur - 313 001
Ph: 560311, 560303 (OFF)
560615 (RES)

Dr. Jean Dreze
C/o Meera Samson
North Institutional Area
Lodi Road, Indian Social Institute
New Delhi - 3

Mr. Julian Boile
Development Network
14, Patliputra Colony
Patna, Bihar - 800013
Ph: 0612-260942, Fax: 0612-261620

Sh. Julius Pascal Osta (Jivan)
1st Floor, Northern Bldg.
14, Patliputra Colony
Ph: 260942

Dr. Kamal Mahendroo
Fellow, Eklavya Field Centre.
Sandia Road, Pipariya.
Dist. Hoshangabad
Madhya Pradesh - 461775
Ph: 07576-22574, 3518 (OFF)
07576-22612 (RES)

Sh. H.L. Mohan
Resource Person
State Resource centre
501, Chitrabanu Road,
Kuvempunagar, Mysore
Karnataka

Sh. Mukut Kalita
Assam DPEP
Department of Education
Assam

Prof. Ramakant Agnihotri
Dept. of Linguistics
University of Delhi
Delhi - 110 007
Ph: 378-7257725

Ms. Shalu Kalra
Consultant
Pedagogical Improvement and Textbook
Development
B-86, Defence Colony
New Delhi 110024
Ph: 4693385 (OFF)
Res: 5590588

Mr. Subir Shukla
Chief Consultant
Pedagogical Improvement and Textbook
Development
B-86, Defence Colony
New Delhi 110024
Ph: 4693385 (OFF)
Res: 2257204

Ms. Subrata Baruah
Consultant, DPEP, Assam
Janakpur path
Kahilipara, Guwahati - 19
Ph: 561985

Mr. Unnikrishnan
Programme Officer
DPEP Kasargod
Near AEO's Office
Kasargod
Kerala
Ph: 0499-521546

Mr. Venu Andley
C/o Eklavya Field Centre.
Sandia Road, Pipariya,
Dist. Hoshangabad
Madhya Pradesh - 461775
Ph: 07576-22574, 3518 (OFF)

Ms. Vipasha Agnihotri
Consultant
Pedagogical Improvement and Textbook
Development
B-86, Defence Colony
New Delhi 110024
Ph: 4693385 (OFF)
Res: 7213963

List of Participants

Sh. Suryanarayana
Principal, DIET Venugopalapuram
Vizianagaram Dist.
Andhra Pradesh
Ph: 08922 - 23948

Dr. V. Sukumar Reddy
S.C.E.R.T., Hyderabad
Andhra Pradesh - 500001
Ph: 237038

Sh. R.V. Suryanarayana
O o the State Project Director,
DPEP, Saifabad, Hyderabad
Andhra Pradesh
Ph: 599089 (O) 3813304 (R)

Sh. G. Shankaraiah
Prof. & Head Dept. Of NFE
SCERT, Hyderabad
Andhra Pradesh - 500001
Ph: 237038
Res:- Shantiniketan
H. No. 1-6-6-3, Chaitanyapuri
Hyderabad - 500060
Ph: 870229

Sh. V. Prakash Dutt
State Project Office,
DPEP o o the Commissioner &
Director of School Education
Saifabad Hyderabad
Andhra Pradesh - 50001

Sh. Purushottam A Patel
14-A, Vasudha Society,
Near Sardar Patel Colony,
Naranpura Road,
Ahmedabad -380014
Ph: 446148(O) 493251(R)

Mr. G.N. Patel
18 B, Vasudha Society,
Near Sardar Patel Colony
P.O. Navjeevan, Ahmedabad
Gujarat - 380014
Ph. 492365(R)

Sh. Raval Mahesh Kumar Prahladbhai
C/o D.H. Raval
Dhalvas, Oppo. Chhinkanivala
Palanpur, Dist. Banaskantha
Pin: 385001 Gujarat
Ph: 52397(O)

Prof. Mahendra Bhatt
273/3 GH, Sector : 19,
Gandhinagar, Gujarat
Ph: 29901

Ms. Sandhya B. Thaker
R A / L Nigam Apartment,
Near Bhavasar Hostel,
Navavadaj, Ahmedabad -13
Gujarat
Ph: 446148 & 446349(O)
7482727(R)

Dr. Dipoooba H. Devada
35/3 Adrapak Nivas
Gujarat Vidyapithar
Ashram Road, Ahmedabad
Gujarat -14
Ph: 446148(O) 6425289(R)

Dr. Manubhai D. Trivedi
'Trimurti', 45, Malaviyanagar,
Rajkot, Gujarat - 360004
Ph: p.p. 360600

Sh. K.L. Khandettar
26, Jay Bajarang Hsg. Soc.
Opp. Sitaram Complex,
Subhanpura, Baroda
Gujarat - 390007
Ph-327662

Dr. S.T. Kapadia
31, Arpan Society
Naranpura, Ahmedabad
Gujarat -380013
Ph: 7416119

Mr. Deepak Prataparay Mehta
New Filter Lane, Near
Takhteshvar Post Office, Bhavnagar
Gujarat - 369002
Ph: (0278) 420434

Sh. Bhal Jayantilal Dharshibhai
Visheshvar Society No.2
Plot: 2258-10, Hill-Drive, Bhavnagar
Gujarat - 364002
Ph: (0278) 431153

Sh. Vasandbhai H. Doshi
Chandravali Society
Kareli Bang, Baroda
Gujarat - 390018
Ph: 420466

Sh. Ramesh Chandra G. Kothari
205 Sai Chambers,
Shiyabag opp. Sardar Patel
Market, Baroda
Gujarat - 390001
Ph: 329566(O)

Sh. Sunil Gujral
District Project Office,
Chawitra Muhlla,
Near Raj Naun, Chamba
Himachal Pradesh
Ph: 01899-25239 (O) p.p. 24835

Sh. Rajkumar Sharma
DIET Saru Chamba, Distt. Chamba
Himachal Pradesh - 176310
Ph: 01899-24401 (O)
01899-54157 (R)

Sh. Devinder Puri
D.P.E.P. Office Mohalla
Chontra Distt. Chamba
Himachal Pradesh -176310
Ph: 01899-25239 (O)

Sh. Manoj Viz
Diet Saru Chamba
Himachal Pradesh -176310
Ph: 01899-24401

Sh. Harish Kumar Kaushal
TTI, DPEP, Dist. Kullu
Himachal Pradesh
Ph: 01902-65324

Sh. Sher Singh
Village Badah
P.O. Mohal, Dist. Kullu
Himachal Pradesh

Sh. R.K. Duggal
C/o D.I.E.T., Near Ran Tal
Nahan Dist. Sirmour
Himachal Pradesh - 173001
Res: Duggal Dwelling
Mall Road Nahan-Sirmour
Himachal Pradesh -173001
Ph: 2609 (O) 4363 (R)

Sh. Bhupendra Kumar Sharma
Diet-Nahan, Dist. Sirmour
Himachal Pradesh
Ph: 2609(O) 4222(R)

Sh. M.S. Thakar
Lecturer, SCERT
Solan.
Himachal Pradesh - 173212
Ph: 23825

Dr. S.L. Gautam
Lecturer, SCERT, Solan
Himachal Pradesh
Ph: 23825

Sh. Naresh Kumar
TTI, State Project Office,
DPEP Shimla
Himachal Pradesh - 171001
Ph: 202364

Sh. C.K. Bharadwaj
Office of the Mission Director
Directorate of Physical Education
Shimla, Himachal Pradesh
Ph: 202364

Sh. Rajendra Kumar Gupta
Lecturer (Education)
DIET Kullu
Himachal Pradesh -175101

Sh. Naresh Kumar Chopra
Lecturer in Science
DIET Kullu
Himachal Pradesh - 175101
Ph: 01902-23131

Sh. Suresh Kumar
Lecturer, DIET Nahan
Dist. Sirmour
Himachal Pradesh - 173001
Ph: 2609(O) 4066(R)

Sh. Dinesh Gulati
C/o Principal DIET, Nahan
Himachal Pradesh - 173001
Ph: 2609(O) 4948(R)

Sh. Basant K. Sharma
841/4 Shimla Road,
Nahan, Dist. Sirmour
Himachal Pradesh - 173001
Ph: 01702-2609 (O) 4234(R)

Sh. Sri Rama Chandra Padhi
Senior Lecturer, D.P.I.A.S.E.
Berhampura, Ganjan
Orissa - 760003
Ph: 0680-6287

Sh. Radhakanta Rath
Senior Lecturer, D.P.I.A.S.E.,
Berhampur, Orissa
Ph: 0680-201449

Asst. Director
T.E. & SCERT, Orissa

Sh. Umanath Praharaj
Shikhya Sandha
Unit-V Bhabaroorin
Orissa
Ph: 402721

Sh. Niranjana Jene
DTE & SCERT, Orissa
Ph: 402928

Dr. Mohit Mohan Mahantray
R.N. I.A.S.E., Cuttack
Ph - 753002 Orissa

Sh. Pramod Kumar Patel
DIET Kalahandi Teacher Education
Dhawanipatra, Kalahandi
Orissa - 766001
Ph: 06670/30280

Dr. Sebak Tripathy
Dr. P.M. Institute of
Advanced Study in Education,
Sambalpur, Orissa
Ph: 31191(R) 20590(O)

Sh. Nilamadhab Parichha
DIET at Bolangir
Dist. Bolangir
Orissa
Ph: 22009(O)

Sh. Prasant Kumar Rath
Dhenkanal, Orissa
Ph: 06762 4725

Dr. Susandhya Mohanty
DIET Sambalpur
At. Ainhpalli, P.O. Budharaj
Dist. Sambalpur
Orissa
Ph: 400789(O) 32017(R)

Ms. Nirmala Kumari Mohapatra
DIET Khurda,
Orissa - 752055
Res: Sector-2, 426 & 427,
Niladri Vihar, Bhubaneswar
Orissa - 16
Ph: 20269(O)

Sh. Arakhita Das
Principal, DIET, Dhenkanal
P.O./Dist. Dhenkanal
Orissa

Sh. Bishner Ch. Patika T.E.
DIET Dhankanal
At./P.O./Dist. Dhenkanal
Orissa
Ph: 06760-4725

Sh. Suresh Kumar Soni
Stab Project Office
Vidya Bhawan, Nihat Ganj
Lucknow, Uttar Pradesh - 226016
Ph: 286480

Sh. R.K. Singh
Vidya Bhawan, Nishatganj
Lucknow, Uttar Pradesh - 226007
Ph: 386480

Sh. Vijay Kumar Saxena
Project Board, Lucknow
Uttar Pradesh
Ph: 386480, 386477

Sh. Shiva Shankar Tribathi

Lecturer, S.I.E.U.P. Alld.
Allenganj
Ph: 608168

Sh. Swami Nath

Lecturer
State Institute of Education U.P.
Allenganj, Allahabad - 608168

Sh. Brij Kishore Dixit

Sonaran Tola, Maholi Sitapur
Uttar Pradesh
Ph: 52251

Sh. Pitamber Datt Jwyal

Jwyal Bhawan, Jaiharikhal
Lansdownie, Uttar Pradesh

Sh. Bachcha Prasad Verma

C/o B.S.A. World Bank Allahabad
Own Address: B.P. Verma
Ret. B.S.A.
Savitri Nagar Naya Jhusi
Allahabad, Uttar Pradesh
C.P.I. Ph: 600762
Education Expansion 600630

Sh. Baf-Krishan Tewari

Manpur North
Near Kant Petrol Pump Haldwani
Nainital, Uttar Pradesh
Ph: 47069 & 24670(R)

Sh. R.P. Naik

Vill. Hirikhar,
Post. Mahadev Ghurhu
Sidharth Nagar, Uttar Pradesh

Sh. Sri Rabindra Mohan Ghosh

Nigamanauda Shiksha Niketan,
Govt. Sponsored Primary
Teachers Training Institute,
P.O. Nigamnagar
Dt. Cooch Behar
West Bengal

Sh. Kalidas Hajra

25/2, Ballygunge Circular Road
Calcutta, West Bengal -19
Ph: 475-3848

Dr. Bishnupada Dutta

25 1B Ballygunge Circular Road
Cal.19 (W.B.)
Per. Add:-23/1B Doctor-lane,
Calcutta, West Bengal -14

Sh. Prabhat Ranjan Goswami

Vill. + P.O. Beliatore
Dt. Bankura
West Bengal - 722203
Ph: 03241-59-264

Sh. S.M. Bhattacharya

19 B Ballygunj Station Road
Calcutta, West Bengal
Ph: 440-4753(O) 4779-700(R)

Sh. Bimal Chandra Joardar

A-8/408, P.O. Kalyani
Dist. Nadia, West Bengal

Sh. Sudawan Bioroi

84, Sarat Bose Road,
Calcutta - West Bengal
Res: P.O. Kriohnagar, Nadx.
West Bengal - 740013
Ph: 474-7697

Sh. Jyotimay Dhar

A-24 Purbadiganta,
Santoshpur Eas
Calcutta, West Bengal
Ph: (033) 472-2113

Sh. Sudhin Paul

33/1, Raja Rammohan Sarani
Calcutta, West Bengal - 700009
Ph: 350-2499(O) 351-0773(R)

Sister M. Cyril Mooney

122 A.J. Ch. Bose Rd.
Calcutta, West Bengal - 700014
Ph: 263845

Sh. Pranab Kr. Dutta

Siksha Bhabani (1st Floor)
P.O. Berhompuri, Dist. Murshidabad
West Bengal
Ph: 03482-20-752 20076 150-951

Sh. Bijan Kumar Biswas
Bikash Bhawan,
Second Floor (Eastern Wing)
Salt Lake City,
Calcutta, West Bengal - 700091
Ph: 033-334-3102

Sh. Gopal Bagchi
Paschim Banga Rajya
Prathamik Shiksha
Unnayan Sanstha,
Bikash Bhawan,
Second Floor, Salt Lake City,
Calcutta, West Bengal - 700091

Sh. Utthanpada Samanta
Off.-19B Ballygunge
Station Road, Calcutta - 700019
Resi.-97, K.N. Sen Road.
Calcutta 700042 (West Bengal)
Ph.440-4753(033)&442-0344(033)

Sh. Pijush Kanti Guha
Bikas Bhawan (7th Floor)
Salt Lake City, Calcutta,
West Bengal - 91
Ph: 033-334-4504 & 334-5094

Dr. Rathindranath De
25/3, Ballygunje Circular Road
Calcutta, West Bengal 700019
Ph: College 475-1848

Dr. Sandhyathaker
Gujarat Vidyapith
Asram road, Ahmedabad
Gujarat
Ph: 446148 & 446349 (O) 7482727(R)

Sh. Harish Kumar Kaushal
V.&P.O. Shamshi-175126
Dist. Kullu
Himachal Pradesh
Ph: 01902-65324

Sh. P. Suryanarayana
Principal, D.I.E.T.
Venugopalpuram,
Vizianagaram Dist.
Andhra Pradesh
Ph: 08922-23948

Sh. Sher Singh
Dy. Project Officer, D.P.E.P.
Vill. Badah P.O. Mohal
Dist. Kullu, Himachal Pradesh

Sh. Rabindra Mohan Ghosh
Nigamananda Shiksha Niketan
Govt. Primary Teachers Training Institute
Nirganagar, Cooch Behar
West Bengal

Sh. Uttanpada Samanta
Dy. District Project Officer,
D.P.E.P. South Zu Pargana,
19B, Ballygunge Station Road,
Calcutta, West Bengal - 700019
Ph: (033) 440-4753

Prof. Mahendra Bhatt
Principal, DIET Sector:12
Gandhinagar Gujarat
Res. 273/3 GH. Sector :19
Gandhinagar, Gujarat
Ph: 29901(R)

Ms. Nirmal Kumari Mohapatra
DIET, Khurda,
Orissa - 752055
Res. Sector 2, 426/427
Niladri Vihar, Bhubaneswar
Orissa -16

Sh. S. Kapadia
31, Arpan Society, Naranpura
Ahmedabad - 380013

Dr. S. M. Nayyar
Professor, VBGST College, IASE
Udaipur (Raj.)
Ph: 524446

Sh. Naresh Kumar
Teacher Training Incharge (state)
Malxilk Cottage-3, Jakhu Round

Ms. Umanath Praharaj
State Project Co-ordinator
DPEP Orissa
Sikhya Sandha
Unit-V, Bhabaneswar
Orissa

Sh. Bishnu Charan Patra
Teacher Educator
DIET Dhenkanal
AT/PO?-Dhenkanal
Dist. Dhenkanal
Orissa

Sh. R.K. Singh
Expert (Training)
U.P. Education For All
State Project Office
Vidya Bhawan Nishatganj
Lucknow, Uttar Pradesh

Sh. S.K. Soni
Expert (Planing & Monitoring)
U.P. Education for All State
Project Office
Vidya Bhawan Nishat Gaj,
Lucknow

Sh. Shiva Shankar Tripathi
Lecturer, State Institute of Education
Allahabad, Uttar Pradesh

Sh. Bijan Kumar Biswas
Assistant State Project Director,
West Bengal D.P.E.P.
Bikas Bhawan, Second Floor
(Eastern wing), Salt Lake City
Calcutta - 700091

Sh. Bimal Chandra Goardar
Deputy Director of School
Education (Basic)
Bikas Bhawan, 7th floor,
Salt Lake City, Calcutta - 19

Dr. Bishnupada Dutta
Dayidharetrg College
23/1B, Doctor Lane
Calcutta-700014

Sh. S.M. Bhattacharya
Chairman, DPSC, Sonta by Prg.
19B, Ballygunj St. Road,
Calcutta - 700019
Ph: 440-4753

Sh. Sudarsan Biswas
Special Officer,
West Bengal Board of Primary
Education, 84, Sarat Bose Road,
Calcutta - 700076

Sh. Vijay Kumar Saxena
Joint Director
U.P. Education for All
Project Board,
Lucknow, Uttar Pradesh

Sh. Pramod Kumar Patel
Teacher Educator
DIET Kalahandi
Bhawani Patna, Kalahandi
Orissa

Sh. Bachcha Prasad Verma
Ret. Basic Shiksha Adhikari
From Allahabad U.P.
Savitri Nagar Colony
Nayee Jhusi, Allahabad
Uttar Pradesh

Sh. Swami Nath
Lecturer,
State Institute of Education
U.P. Allahabad
S.I.E. Allahabad
Uttar Pradesh

Sh. Nilamadhab Parichha
DIET At/PO/ Balangir
Orissa, DIET Bolangir
Orissa

Sh. Naush Kumar Chopra
Lecturer, DIET Kullu
Himachal Pradesh

Sh. Rajendra Kumar Gupta
Lecturer, DIET Kullu
Himachal Pradesh

Sh. G. Shankaraian
Prof. & Head Dept. of NFE
SCERT, Hyderabad
Andhra Pradesh - 500001
Ph: 237038
Res: Shantiniketan
H.No.1-6-6/3, Chaitanyapuri,
Hyderabad - 500060
Ph: 870229

Dr. Prem Lata Amolik
40, Khrol Colony
Fatchpura, Udaipur
Rajasthan
Ph. 525153

94477 38542

~~Shriya - Meera - Dr~~

Dr. S.L. Gautam
Lecturer, SCERT, Srani
Himachal Pradesh
Ph. 017902.23825

Dr. D.N. Dani
92, Saheli Marg
V.B. Staff Colony,
Udaipur - 313001
Ph. 521312(R)

Dr. M.P. Sharma
36, Kharol Colony
Fatehpura, Udaipur
Rajasthan
Ph. 560914(O) 525152(R)

Dr. Usha Patni
88, Saheli Marg, V.B. Staff Qtrs.
Udaipur, Rajasthan
Ph: 560311(O) 526177(R)

~~SCERTS~~

OT

9349444827