## CLASSROOM PROCESSES

# COMPARATIVE CASE STUDIES KERALA STATE

PREPARED BY

Dr. Vasant D. Bhat

Reader in Education

REGIONAL INSTITUTE OF EDUCATION, MYSORE (NCERT)

JULY 2000

## **ACKNOWLEDGEMENTS**

This project is a part of a national project undertaken by the NCERT, New Delhi as one of its activity under the DPEP. Considering that this is a maiden venture of mine in qualitative research, on looking back, I feel that I have gained academically. I am extremely thankful to **Prof**. C.S.Nagaraju, for having provided me with an opportunity to participate and learn from the project. But for his academic guidance and timely interventions at various stages of this project, it would not have been possible to conduct this project the way it has been done.

In this moment of elation, I wish to recall the help, cooperation and quidance provided by several persons during the course of this project.

- Prof.A.K.Sharma and Prof.J.S.Rajput, the ex and the present Directors of NCERT, New Delhi.
- Prof. Ved Prakash, Head, DPEP-CRG, NCERT, New Delhi.
- Prof.G.Ravindra, Principal, Regional Institute of Education, Mysore.
- Prof.K.Dorasami, Dean of Instruction, Regional Institute of Education, Mysore.
- Dr.B.K.Anitha, NIAS, Bangalore who worked as a consultant for the project and undertook the field -work.
- My colleagues in the NCERT, Prof.K.K.Vashishtha, Dr.Sandhya Paranjpe,
   Dr.Usha Dutta and the secretarial staff of the DPSEE, New Delhi;
   Dr.K.B.Rath and Dr. Arora, Regional Institute of Education, Ajmer.
   Shri Panikkar, DPEP-CRG and Shri K.Ramachandra Rao, RIE, Mysore.
- All Teachers in the schools studied and Trainers in the Palakkad block.
- The Parents and the Children who were interviewed.

I acknowledge them all sincerely and gratefully.

Dr. Vasant D. Bhat Academic Coordinator

## **CONTENTS**

	ACKNOWLEDGEMENTS  CONTENTS  LIST OF TABLES	
SECTION	II: THE STUDY AND ITS CONTEXT	1-10
	Need for the Study Objectives Methodology The Nature of Data Method of Analysis The Location The Sample The Details of Observation	
SECTION	Vavulliapuram Government Lower Primary School (VGLPS) Government Moyan Lower Primary School (GMLPS) Kalepulli Upper Primary School (KUPS) Attipetta KMMLP School (AKMMLPS) Vechapadi Lower Primary School Daily Scheduling of Teaching Punctuality of teachers and pupils Combined Classes Student Attendance Enrollment and Retention School Time Table Role of the Headmistress	11-33
SECTION	Planning of Instructional Activities Starting of the Class Experiential Learning Analysis of Pupil Participation Nature of Participation Team Teaching Combination of conventional and activity based approach. Organising Activity Based Teaching	34-101

Supervision of Pupil Activity
Reinforcement
Remediation
Teaching Learning Material Used
Textbooks
Joyfulness in Learning
Ending of a Class Period
Evaluation
Equality of Opportunity to Learn
Incentives for Children

## SECTION IV: THE TRAINING CONTEXT AND THE TEACHERS 102-109

Training Received by the Teachers The Teachers

## SECTION V: FINDINGS AND IMPLICATIONS 110-140

The Background

Section I: The Status Section II. The Antecedent Implications

## LIST OF TABLES

- **Table 1:** Typology of Schools Selected
- **Table 2:** Number of days and total number of class periods observed.
- Table 3: Standard wise and Subject wise Class Periods\* observed
- Table 4: Class wise Strength of VGLPS
- **Table 5:** Class wise Strength of GMLPS
- **Table 6:** Class wise Strength of KUPS
- Table 7: Class wise Strength of AKMMLPS
- **Table 8:** Teacher Attendance at the Start and End of the School
- **Table 9:** Distance Traveled by the Teachers
- **Table 10:** Nature of Combination in Classes
- Table 11: Student Attendance Across Schools (in percentage)
- **Table 12:** Class wise Attendance (in percentage)
- **Table 13:** Student Attendance during three Rounds
- **Table 14:** The time table followed by the VGLPS during the days of observation
- **Table 15:** The timetable followed by the GMLPS during the days of observation
- **Table 16:** The time table followed by the KUPS during the days of observation
- **Table 17:** The time table followed by the AKMMLPS during the days of observation
- **Table 18:** Time when Planning is done by the Teachers
- **Table 19:** Loss of Instructional Time in a Day
- **Table 20:** Loss of Instructional Time within a Class Period (in min)
- **Table 21:** Ways in which the Learning Episode Begins
- Table 22: Number of Learning Episodes\* with Different Degrees of Pupil Participation
- Table 23: What Children do during Individual Work
- **Table 24:** Small Group Activities in Class
- **Table 25:** What children do when the teacher is explaining classwise
- **Table 26:** What Children do When the Teacher is Explaining Subjectwise
- **Table 27:** Use of Activity in Classroom
- **Table 28:** Types of supervision by teachers
- **Table 29:** Use of Teaching Learning Material
- Table 30: Use of Songs in Classroom
- **Table 31:** Ways in which the Learning Episode Ends
- Table 32: Gender Discriminatory Practices Observed in the Classroom
- **Table 33:** Proportion of Teachers Stating Different Goals of Primary Education
- Table 34: Teacher Reaction to the DPEP Approach to Teaching

## CLASSROOM PROCESSES

# COMPARATIVE CASE STUDIES KERALA STATE

## SECTION I THE STUDY AND ITS CONTEXT

The six districts, Kasargod, Malappuram, Vynad, Thiruvananthapuram, Idukki and Palakkad were chosen as the DPEP districts in Kerala on the criterion that the Total Literacy Campaign had been successful and it generated an enhanced demand for elementary education. However, the other criterion of lower literacy percentage of girls than the national average is not applicable to any of the districts in Kerala.

Primary Education Development Society, Kerala (PEDSK) has started functioning with the Chief Minister as the Chairman and the Minister of Education as the Vice-Chairman. The society is an autonomous body and it synchronises the programme at different levels.

## **Need for the Study**

After the advent of the District Primary Education Project in Kerala, there has been an intense debate in the public discourse about the project. The culminating objective of the DPEP is the improvement of classroom and school practices to ensure equity in educational outcomes especially in government schools serving common people. Most of the interventions aim at this over riding objective and hence it is felt necessary to develop a benchmark of the processes at the initial stages of the project. This would not only provide

inputs for designing appropriate interventions, but also would be the basis for future evaluations of their efficacy.

### **Design of the Study**

Since the study emphasizes the processes, the data needed for the study required are primarily qualitative, to be supplemented by quantitative data. Therefore the design followed is that of case study. The objectives of the study are as follows.

## **Objectives**

- Generation of descriptive categories of classroom processes based on observations in schools having different structural and contextual characteristics.
- Know and categorize the attitudes of the teachers toward the factors associated with goals, support provided to them for teaching, students, materials, supervision and monitoring, the approach to teaching, and the evaluation.
- Relate teacher attitudinal categories with the classroom process categories.
- Measure the quantity of learning experiences in terms of 'opportunity time' provided to children in schools having different structural and contextual characteristics.
- To examine the interventions introduced with a view to influence classroom processes

#### Methodology

The study has adopted case study approach of social anthropology as applied to study educational institutions and organisations while generating the data. Usual tools of such studies are observation, in depth interviews of teachers, non-obtrusive measures, records and documents etc. Studies of this tradition record detailed observations in descriptive fashion to reflect the reality and later content analyse them to generate categories in specified contexts.

The study was a part of a national project involving seven locations in different states. A broad framework was evolved in a workshop in which the field workers and faculty associated with the project participated. The purpose of the framework is to maintain

uniformity of focus in all field sites/. Field workers were provided experiences towards internalization of the framework both during national workshop and also in the respective states before starting their systematic observation. The description of the classroom processes and the contexts were captured in their natural flow and the aspects identified in the framework given below emerge out of the analysis of the descriptions. One has to bear in mind that the activities do not take place in the real classroom in a discrete way and many aspects under consideration are embedded and enmeshed with each other. Same observation can lend itself for analysis to identify different aspects or one aspect may emerge out of several observzatio9ns. The study is about deconstructing the observations to derive the categories representing different aspects and reconstruct the same to provide the underlying basis and manifestations of meanings. Therefore application of the framework is not mechanical.

#### The Nature of Data

The data generated were of several kinds and were obtained from the sampled schools and the training agency. They were,

- Observation reports for each school for the duration of six days spread over September 1999 to April 2000.
- Audio record of teacher talks, happenings in classroom, and interviews
- *Video record of one day's classroom/school activities*. This was done parallel to the observation and meant for ensuring reliability of the data from observation.
- Field notes on the interviews with teachers and of informal talk with various persons.
- *Interviews* with community and children.

In addition to the information from the schools, wherever possible, inservice teacher training was observed and printed material associated with training was also collected.

## **Method of Analysis**

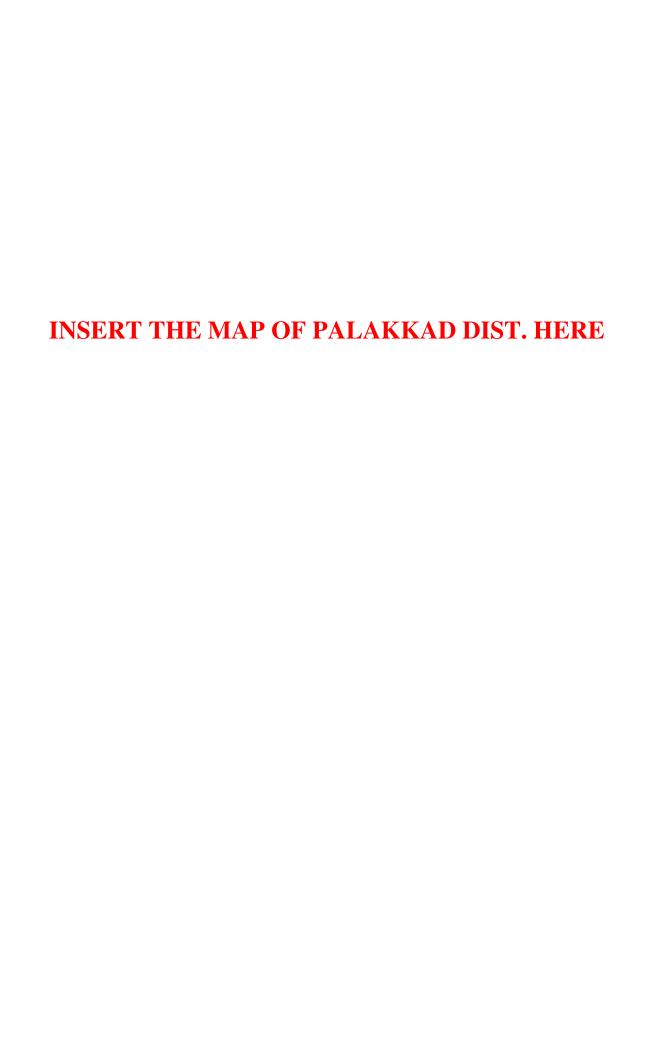
The data was generated to prepare case studies of different types of schools based upon which cross- site analysis was made to prepare the report (Miles and Huberman, 1984). Typical to any qualitative study of this kind, enormous descriptive data was generated requiring more time to exhaust the possibilities. Due to a constraint of time, the current report is restricted to some salient aspects to develop a benchmark of classroom processes. The steps followed to analyse the observations were as follows.

- The write-ups were *read* and *re-read*.
- *Distinct observations* on different aspects were *identified* as one read the writeups. As many distinct aspects as possible were generated.
- A coding system was developed to represent each of the distinct aspects to deconstruct the text.
- The *deconstructed text* in relation to different aspects were examined and *graded* on a continuum based on appropriate scales.
- Using the scale placements the aspects were reconstructed with examples/illustrations

The reconstruction was made under broader categories like school and its condition, routines, methodology, teacher-pupil interaction, evaluation, etc.

#### The Location

Palakkad is one amongst the three districts chosen for the first phase (expansion) of DPEP and the programme is being implemented since 1997. The district has in place the structures like PTA and MPTA (Mother Parent Teacher Association), School Welfare Committees, School Resource Groups, Village Education Committees at the school level, the Lead School and the Cluster Resource Group at the cluster level, Block Resource Group and Block Advisory Committee at the block level, the District Resource Group, the District Monitoring Cell at the district level and the State Resource Group and State Advisory Committee at the State level. Figure 1 provides the organisational structure for the implementation of the DPEP in the state.



STATE LEVEL State **Primary** Education State Resource Development Group Project Society of (SRG) Kerala(PEDSK) Office District Level District District District District Institute **Project** Advisory Implementation of Education and Office Committee Training (DIET) **Board Block Level Block Resource Block Advisory** Group Committee PANCHAYAT LEVEL Village Education Cluster Resource Centre Committee (VEC) (CRC) SCHOOL LEVEL Parent Teacher School Welfare Mother Parent Teacher School Resource Association (PTA) Committee Association (MPTA) Group (SRG)

Figure 1: The Organisational Structure for Implementation of the DPEP

Source: News Letter, DPEP Idukki District, Published by Project Coordinator, DPEP Idukki

## The Sample

The present study is undertaken with the purpose of establishing benchmark on the classroom process in different contexts of primary education in Kerala. Hence the study was planned to provide a descriptive picture of classroom processes and interactions in diverse school/community contexts in the form of comparative case studies. The study is expected to reflect the diverse contexts in each of the selected primary schools in the district of Palakkad. For representing the diverse context it was necessary to include different types of primary schools under the study. After a study of the records maintained on the school at the district HQ. and in consultation with the District Project Office staff of DPEP at Palkkad the following 5 types of schools of the district were selected:

**Table 1: Typology of Schools Selected** 

Name of the School	Acronyms used	Level	Management	Location	Туре	Medium	Predominant Student Population
Governmen t Moyan Lower Primary School	GMLPS	Lower Primary (I-IV)	Government	Urban	Monograde	Malayalam	Muslim
Vavulliapur am Governmen t Lower Primary School	VGLPS	Lower Primary	Government	Rural	Monograde	Malayalam	Muslims, SC and OBC
Kalepulli Upper Primary School	KUPS	Upper Primary (I-VIII)	Private	Rural	Monograde	Malayalam	Scheduled Caste and OBC
Attipetta KMM Lower Primary School	AKMMLPS	Lower Primary	Private	Rural	Monograde	Malayalam	No community Predominance. Rural Agricultural
Vechapadi Lower Primary School	VLPS	Lower Primary	Government (Social Welfare)	Interior (Tribal)	Monograde	Tamil	Tribal

The district has both government and private management primary schools. The district also has a tribal belt in which the government, with the help of its social welfare department, runs primary schools. A considerable proportion of the student population in the district consists

of minority Muslims; scheduled castes (SC), scheduled tribes (ST) and other backward community (OBC). Children belonging to the community of Exhales, Vishwakarmas, Nairs, and immigrant Tamil and Telugu speaking children apart from the Muslim and tribal population attend the schools sampled in the study. Unlike most other states in the country, Kerala has no multigrade context of primary education. All schools are monograde with the number of teachers being equal to or more than the number of classes, Wherever the school caters to Muslim students the Government of Kerala has provided the school with an additional Urdu teacher

#### The Details of Observation

As stated earlier, the study followed in-depth observation with a descriptive frame of reference spread over three rounds of field visits. Each field visit consisted of two days duration during which a few classes were observed and interviews with the head master; the teachers, some children and the community members/parents were conducted. A summary of the observation in terms of days and class periods is given in table 2.

Table 2: Number of days and total number of class periods observed.

	VGLPS	GMLPS	AKMMPS	KUPS	VLPS	Total
No. of days	6	6	7	6	6	31
No. of periods observed	30	28	34	26	6	124

During the three rounds of observation, apart from the interviews with teachers, parents and children, extensive qualitative data in the form of observation/field notes were developed. Care was taken to make complete observation of class periods and to distribute such observations across grades and teachers. Audio recordings done in the classrooms supported almost all these observations. In the third round of the observations, all the events of a school were video recorded. Hence, for every school, one day's happening on video was available. It needs to be mentioned that even though the plan was to keep sufficient gap inbetween rounds, it could not be accomplished due to a delay in the starting of the field work and other reasons. The distribution of the observation across grades and subjects is given in table 3.

Table 3: Standard wise and Subject wise Class Periods\* observed

		No. of Periods Observed						
School	Standard	Malayalam	Mathematics	EVS	Total No. of Classes			
	I	4	2	2	8			
	II	2	2	2	6			
VGLPS	III	4	1	1	6			
	IV	2	5	3	10			
	Total	12	10	8	30			
	I	7	2	-	9			
	II	2	1	2	5			
GMLPS	III	1	3	3	7			
	IV	3	4	-	7			
	Total	13	10	5	28			
	I	4	2	-	6			
	II	4	3	2	9			
KUPS	III	4	4	-	8			
	IV	3	3	3	9			
	Total	16	12	5	32			
	I	4	3	-	7			
AKMM-	II	3	4	2	9			
LPS	III	4	1	-	5			
	IV	2	1	2	5			
	Total	13	9	4	26			
	I	-	-	-	-			
	II	2	-	-	2			
VLPS	III	2	-	2	4			
	IV	-	-	-	-			
	Total	4	the estimation is no	2	6			

<sup>(\*</sup>A class period is a division of school time and the estimation is not based on a learning episode)

The class period in a school or across schools is not the same. Table 4 provides a picture of the observations made in terms of duration in real time measure across categories. Of the class periods observed some were fully spent on evaluation and hence such periods have been separated out and given in brackets.

Table 3: Duration of Observation across subjects and standards (in minutes)

		No. of Periods Observed (in minutes)						
School	Std.	Malayalam	Mathematics	EVS	Total Duration of observation			
	I	130 (45)	90 (45)	75	295 (90)			
	II	60 (90)	60 (75)	60	180 (165)			
VGLPS	III	160 (15)	40	(20)	200 (35)			
	IV	90	170 (90)	95	355 (90)			
	Total	440 (150)	360 (210)	230 (20)	1030 (380)			
	I	300	70	-	370			
	II	90	30	90	210			
GMLPS	III	45	110	120	275			
	IV	135	165	-	300			
	Total	570	375	210	1155			
	I	150 (30)	75 (30)	-	225 (60)			
	II	180	105	95	380			
KUPS	III	165	160	-	325			
	IV	135	110	120	365			
	Total	630 (30)	450 (30)	215	1295 (60)			
	I	170 (30)	125 (30)	-	295 (60)			
AKMM-	II	110 (30)	180 (20)	85 (20)	375 (70)			
LPS	III	185	30 (45)	-	215 (45)			
	IV	75 (75)	30	70	175 (75)			
	Total	540 (135)	365 (95)	155 (20)	1060 (250)			
	I	90	20	-	110			
	II	90	20	-	110			
VLPS*	III	60	-	75	135			
	IV	60	-	75	135			
	Total	150	20	75	245			

(\* In VLPS the grades I and II, and III and IV were combined on all occasions. Hence the duration of observation is shown for both classes whereas the total duration shows the actual time spent on observation.)

## **SECTION II**

## THE SCHOOL AND ITS PROFILE

The present study was undertaken with the purpose of establishing bench on the classroom process in different contexts of primary education in Kerala. Hence the study was planned to provide a descriptive picture of classroom processes and interactions in diverse school/community contexts in the form of comparative case studies. The study is expected to reflect the diverse contexts in each of the selected primary schools in the district of Palakkad. For representing the diverse context it was necessary to include different types of primary schools under the study. After a study of the records maintained on the school at the district HQ. And in consultation with the District Project Office staff of DPEP at Palakkad the following 5 types of schools of the district were selected. A brief description of each of the sampled school is provided below.

## Vavulliapuram Government Lower Primary School (VGLPS)

Vavilliapuram Lower Primary School is a rural *lower primary school* and is managed by the Government of Kerala. It has classes from I to IV. It is a Malayalam medium *monograde school* wherein each class is assigned to one teacher who is required to teach all subjects to that class. Since the school caters to the Muslim population of the locality, it also undertakes teaching of Arabic, for which a separate teacher is provided. The school has a total number of five teachers apart from a Head Mistress. The strength of the school is 146 out of which 81 are boys and 65 are girls. The table below summarizes the staff and student strength.

Apart from Muslims, the school has on its rolls the children belonging to *scheduled* caste and *scheduled tribe* and *other backward community*.

The school is located on the main road in about 44 cents of land and the building, which is 75 years old, is almost in a dilapidated condition. The built up area of the school is about 400 sq. fts, and it falls short of 460 sq. fts., which, as per the norms, is the minimum area required for appointment of a sweeper for maintenance. It has a large hall of 80x20 feet and a room of 20x20 feet. The hall accommodates classes II, III and IV whereas, the room accommodates class I, HM's office, and staff room. Mid-day meal is also cooked in this room and the teaching aids and a cupboard are also kept in it.

**Table 4: Class wise Strength of VGLPS** 

Class	\$	Teacher		
	Boys	Girls	Total	
Standard I	16	10	26	Ms. Pankaj
Standard II	28	27	55	Ms. Laila
Standard III	17	12	29	Ms. Kamala
Standard IV	20	16	36	Mr. Rashappan
Arabic Teacher				Mr. Mustafa
Head Mistress				Ms. V.M. Janaki
Total	81	65	146	

The school building was donated by a community member who did not have children. But now, his relatives who are the legal heirs want the property back due to its high commercial value. Hence, the building has not been maintained for a long time and the walls and floors are badly damaged. The roof, in a portion, is likely to fall and has been declared unsafe by the engineers of the public works department. One part of the building is dark and dingy with little ventilation. The building is under litigation for the last 10 years.

The school has no toilet facility. Drinking water is available in the form of an open well and a bore well just outside the school. A little space in the front and at the back is available for children to play.

Most children come from families of agricultural labourers. There are two English medium schools at a distance of about 5 kms, Due to lack of popularity of government Malayalam medium schools, the next nearest government school was closed. Children have

to walk sometimes more than 2 kms, to reach the school. The school functions from 10.00 am to 4 pm. It has a Parent Teacher Association.

## **Government Moyan Lower Primary School (GMLPS)**

Government Moyan Lower Primary School is an *urban lower primary school* and is managed by the Government of Kerala. The school is a Malayalam medium school and it is one of the oldest schools in Palakkad district. It was part of a larger school earlier and was separated by a Government Order in 1961. The school runs classes from I to IV, each having two sections except for standard I which has three sections. This is probably because this school has started running a preschool recently under the PTA which might have increased the enrollment in class I. The preschool is yet to be recognized. As per the norms of the Government of Kerala, if the strength in a class is 96 or more the school is entitled to have a third section. The strength of Standard I at present is 98. The school has two male and seven female teachers. The school caters to a predominantly Muslim population with some SC, OBC and other category children. The school is located along the main road in the heart of the city. There is a large tree in the compound from which some wood for cooking the midday meal is got.

**Table 5: Class wise Strength of GMLPS** 

Class	Stud	lent Stre	ength	Teacher	
Class	Boys	Girls	Total	reaction	
Standard I A	16	15	31	Ms. Sabila	
Standard I B	16	17	33	Ms. Vijaya Kumari	
Standard I C	16	16	32	Ms. Kamalam	
Standard II A	14	21	35	Mr. Purushotam	
Standard II B	15	20	35	Ms. Chinna	
Standard III A	17	16	33	Ms. Lata	
Standard III B	18	15	33	Ms. Ullasini	
Standard IV A	14	18	32	Ms. Reena	
Standard IV B	14	19	33	Mr. Divakaran	
ArabicTeacher				Name Not Known	
Headmistress				Ms. Kamalam	
Total	140	157	297		

The teacher of Standard I C, Ms. Kamalam is also the Head Mistress of this school. It was found that on most occasions the children in this section were redistributed to the other two sections of standard I in order to relieve the HM of the teaching work and enable her to look after administration of the school. This arrangement, however, not approved by the Block Resource Centre personnel, who provide training and school based support in the implementation of the District Primary Education Programme (DPEP) in the block. This is what one of the trainers had to say about the arrangement:

"We have constantly said that the (sections in) Standard I must not be combined (with any other section) and that the MM must not be incharge of Standard I. But the school does not bother".

The school is built on three sides of a rectangle. The block where standards III and IV are located is like an auditorium and is built from the Mandal Panchayat fund. It is a large hall of 18x20 feet and has lights and fans fitted in it. It is made of RCC and so is the room in which standard II is located which is of 20x20 dimension. The other rooms though large and spacious are in blocks, which have tiled roof. The area of the play- ground is about .75 acres. The school runs from 10.00 am to 4.00 p.m. It has an active PTA. Several incentive programmes of the Government of Kerala are being implemented in this school.

The school has been active in raising funds from the community. The school had organised a drama – a benefit show – to raise funds for the school. A hall has been constructed using the Mandal Panchayat funds. The school has also managed to collect funds from local businessmen. The proprietors of Pavizha Jewellers gave Rs.5000/- with the help of which they bought lights and fan.

#### Kalepulli Upper Primary School (KUPS)

The Kalepulli School is a *rural upper primary school* run by a private management. It is a Malayalam medium school. The school started about 90 years back and draws children within a radius of 1.5 kms. The management of the school has changed hands in 1987. The school manager is the Headmaster and his wife the Assistant. The management runs three schools, namely, Lakshmi Sarejpu LPS which is 130 years old, Murugani LPS which is about 100 years old. The school has total student strength of 936 out of which 253 are SC students. The other castes to which the school caters to are Ezhavas, Viswakarmas and Nairs.

Table 6: Class wise Strength of KUPS

	Stude	nt Streng	th					
Class	Boys	Boys			Girls			Teachers*
	SC	Others	Total	SC	Othe rs	Total	_	
Std. I	10	42	52	9	41	50	102	Ms. Shaila
Std. II	21	38	59	18	39	57	116	Ms. Rukmini Devi
Std. III	16	40	56	19	39	58	114	Ms. Geetha/ Ms. Latha
Std. IV	18	27	55	12	38	50	105	Ms. Ambika/ Ms. Alliamma
Head Master								Mr. Lakshmanan
Total (LPS)	65	147	222	58	157	215	437	
School	135	352	487	118	331	449	936	

The lower primary section i.e. classes from 1 to IV has seven female teachers apart from the manager and an Urdu teacher who are males. The nearest primary school is about 2 kms. Away. The school has got the award of DPEP as the best school that caters to the SC students. It is located in the Marathora Panchayat area. This Panchayat did not have a high school till last year. The staff room and the HM's rooms are in one block, which is newly constructed. The three sections of standard I is in one building and standards II and III are in another building which also houses a library room. The IV standard alongwith the V, VI and VII are in another building. The buildings are close to each other and have a bare minimum structure. The school building is an old one with an inner room and corridors on all four sides, which are converted into classrooms. The staff and HM's room has a RCC roof whereas the other rooms are tile roofed. Most children of this school are from families that are of agricultural labourers. According to the school authorities 90 percent of the children who pass out go to the nearby high school. On normal days, the school runs from 9.30 a.m. to 4.00 p.m. with a lunch break of one hour at 12.30 p.m. On Fridays the school starts early and an additional half an hour break along with one hour for Namaz is given. The school also functions on some Saturdays since a minimum of 200 working days is required per academic year according to the Education Department. Last year the school had worked for 196 days. It has a Parent Teacher Association, which meets five to six times a year. The school playground is about two acres. The rooms are spacious and confirm to the Kerala Education Act of 1959, according to which the classroom must have a size of 200 sq.ft. i.e. 20x20x12.

Of the 936 students studying upto VIII, more than 80 percent of the children are OBCs, Ezhavas, Asharies (Carpenter) and Thattans (Gold Smiths). About 2% of the children come from forward community and 5% are Muslims. Most children come from Marudarola Panchayat and specifically from Kalepulli village.

## Attipetta KMMLP School (AKMMLPS)

The Attipetta KMMLP School is a private *management rural lower primary school* run by the Mangolta Kawa Trust. This school also is a Malayalam medium school. The school is about 1 km. Away from the main road and the approach road is a mud road wide enough to allow auto-rickshaws to ply. The school is located very close to a temple and one has to cross a pond used by the villagers to take bath, wash cloths and bathe their cattle. The school was started in 1917. There were no private English medium schools or Government schools in this village till recently. Now, the village has an English medium school also which is gaining in popularity. Due to a drop in the enrolment of this school, a section in class II was closed and a teacher who had paid huge amount for appointment lost his job. The school has a total of 340 children of which 162 are boys and 178 are girls.

The school has I to IV standards with 2 to 3 sections per standard. It has two male and 8 female teachers. This school has got the award for having the best Village Education Committee. The school timings are 9.30 a.m. to 4.00 p.m. On Fridays, the school starts early and a one and a half an hour lunch break are given to help the Muslim students attend Namaz. The school has a reasonably good building, which is spacious and an open well for drinking water, It has a reasonably good library containing about 200 books. The school has a PTA, which meets about four times in a year.

**Table 7: Class wise Strength of AKMMLPS** 

Class	Stu	dent Stre	ength	Teacher
	Boys	Girls	Total	
Standard I A	13	20	33	Ms. Anitha C.
Standard I B	16	17	33	Mr. Anandan P.
Standard II A	15	15	30	Ms. Vijayalakshmi B.P.
Standard II B	14	15	29	Ms. Latha K.S.
Standard II C	14	15	29	Ms. Maju M.R.
Standard III A	19	25	44	Ms. Saroja M.
Standard III B	19	24	43	Mr. Radhakrishnan A.
Standard IV A				Ms. Zeena P.K.
Standard IV B	52	47	99	Ms. Girija R.
Standard IV C				Ms. Latha P.K.
Headmistress				Ms. Chandralekha
Total	162	178	340	

## **Vechapadi Lower Primary School**

This school is a tribal Tamil medium school situated in the Mannarkad Block. The school comes under Sholayar Panchayat, Ward No.7 and caters to the children coming from Vellagulam and Mulagangal villages. The first village is quite close to the school whereas the second is about 8 kms away. There is no motorable road that leads to this village and has no electricity. People in the village depend on a running stream for drinking water. The school has a bore well, which has been under repair for a long time. To reach this school one has to get down at Kalalakandy and walk about 4 kms, across two hills. The school has a total strength of 49 of which 28 children belongs to Vellagalam village and 21 to the Mulagangal village. The majority of the first standard children come from the far off village. The school was built 25 years back and is managed by the Government of Kerala. It has classes from I to IV and the official timings of the school are 10.00 a.m. to 4.00 p.m. The school is yet to attract all the students in the nearby hamlets since some are not yet coming to the school.

A nearby school started by a Christian missionary has been gaining in popularity among the tribal community. Teachers say that the school has less strength because of the absence of hostels. The people in thee tribes have no permanent jobs. They graze cattle or go

as agricultural labourers. Some go to work in tea plantations, which are at a distance. Most such labourers go to Varadimalai Estate, which is about 6 kms. Away. Discussions revealed that earlier these tribes consisted of Tamil settlers. Later when conditions IN Tamil Nadu improved they returned. Because of their larger presence, the medium was Tamil. Now the community wants Malayalam medium because the Tamil medium upper primary school is far away. Their language has no resemblance to either Tamil or Malayalam.

The school also has no DPEP volunteers for the enrolment drive. The building of this school is an RCC construction, which is quite spacious with four rooms for conducting the four classes. The school also has four residential quarters for the teachers since the approved staff strength of this school is four including the headmaster. The school has a PTA. It was reported that the local panchayat has sanctioned Rs.4 lakhs for the construction of the road but no contractor is ready to take up the work. This school is one among the few schools run by the Government of Kerala in Tamil Medium for tribal children whereas in this block there is a Malayalam medium school also.

## **Starting of the School**

It was found that all primary schools do not follow the same time either for starting or closing. The government schools start at 10.00 a.m. and close at 4.00 p.m. whereas the private schools work for a longer duration and started as early as 9.30 a.m. and worked even beyond 4.00 p.m. The intermittent breaks provided to the children were also not the same across the schools. Usually a 10-15 minute break around 11.30 a.m. and 3.15 p.m. and a one hour lunch break between 12.30 p.m. to 2.30 p.m. were provided.

It was observed that the schools follow a separate schedule on Fridays if they are located in the Muslim locality or if they cater to Muslim children. This is particularly to help the Muslim children to attend the Namaz in the noon. The classes in both the private schools observed were found to start early by half an hour and instead of one hour break for lunch a one and a half-hour break was provided. This however does not apply to the tribal school covered under the study, which had no definite starting, or closing time. At least on four occasions the school did not start before 11.00 a.m. This however does not mean that the teacher was not available since they were provided with residential quarters facility by the Government which was very near to the school building.

The schools have mechanism whereby the administrative control and supervision starts with the starting of the school itself. It is done either in the form of teachers signing an attendance kept in the HM's room or collecting the student attendance register from HM.s room in the morning and depositing it back at the time of closing or more directly through the practice of getting the initials of the HM on the lesson notes prepared by the teachers for the day as was observed in one of the private schools. Even though the last practice is justified by the HM as legitimate in discharging her academic supervisory function, the manner in which it is performed may make it either academic or administrative. It is done more as a routine without any discussion, suggestion or guidance whatsoever. Even the teachers did not question the practice and underwent it as a routine. Another reason that made the practice look like a routine was the fact that on a day when the HM was on leave, the incharge HM performed the act of signing on the sheets.

An exception to the above description of the way a school starts was found in the VLPS – the Tamil medium tribal school. This school had none of the above practices observed. In that sense there were no separate school routines for starting of the school. The school commenced with the starting of the class, which normally was in the form of noting the attendance of children present on the day.

Generally, the ringing of a bell marked the starting of the school. The ringing of the bell is also an indication of students and teachers to assemble for a morning assembly. In the assembly, children were found to stand in lines or rows. The lines or rows are made classwise. The teacher stands at the back or congregates somewhere. They sometimes give instructions to children to stand in an orderly manner but generally they are unconcerned and preoccupied with talking to each other. In schools where both male and female teachers are present, it is the male teachers or the female headmistress who take an active part in organising the children for assembly. In three out of the five schools the school had leaders for the assembly. The leaders were found to lead the assembled children in singing or take a pledge. The songs sung were different in different schools and they were either prayers, patriotic songs or the national anthem. The HM makes announcements and gives instructions that concern the entire school.

## **Punctuality of teachers and pupils**

It is expected that all teachers including the Headmaster and the children are available at the time that the school starts. It was observed in the study that on many occasions the

teachers and sometimes the Headmaster were not present at the time of the starting of the school. This was more often found in the government lower primary schools than in the private management schools. This did not affect the starting time of the school except in the case of the tribal school. Whichever teacher was present at the time of starting, undertook school routines and started the school. There seems to be an implicit understanding among the teachers in the school regarding the starting of the school and on occasions even when the Headmaster, who is the head of the school, was absent the school started on time. Usually the starting of the school was done with the ringing of the bell followed by a school assembly. Children sing a prayer and take an oath and some schools they sing the National Anthem in the assembly. Some important announcements regarding common functions or activities of the school or achievements of the school were made known to the children in the assembly. Children usually stood in class-wise lines and after the assembly went to their respective classes in lines. However, such a practice was absent in remote schools and the discipline shown by the children reduced as one moved away from the city to schools located in rural to remote areas.

It has been mentioned elsewhere that the DPEP envisages formation of School Resource Groups consisting of all the teachers and the Headmaster of the school. This group is basically constituted to ensure professional interaction among the teachers and to facilitate instructional planning. In schools where more than one section of a particular standard existed, the teachers were expected to ensure that the inputs provided to children in different sections were comparable since they were part of a single group. If this were not done, the same class but belong to different sections would in effect be undergoing different kinds of education. Whereas there are no free periods available to the primary school teachers, the interaction among SRG members for planning instruction and evaluation can happen either at the beginning or at the end of school time. The DPEP envisages that the teachers spend at least 45 minutes in a day in planning for the instructional activities of the next day and meet once in a month for longer duration planning or for discussing any other issues at the classroom level. The Cluster Resource Persons and the Block Resource Person, who are the trainers, are expected to organise this meeting as stated in the functions of the BRC. This would mean that the students and the teachers will not have the same time of closing. The classes are expected to be organised till 3.15 p.m. after which the children either play or go home whereas the SRG will meet for planning till 4.00 p.m. which is the actual closing time of the school. It was observed that on most occasions the closing time for the children and the teachers were the same and ranged between 3.00 p.m. to 3.30 p.m. In other words even though the SRG existed on paper it did not exist in reality to fulfill whatever functions it was meant for.

Punctuality of the teachers was studied in terms of the attendance at the start and the end of the school.

Table 8: Teacher Attendance at the Start and End of the School

	VGLPS	GMLPS	AKMMLPS	KUPS	VLPS
At Start	52%	66.9%	85%	80%	0%
At the End	70.5%	90%	94.8%	92%	20%
Teacher	4F+1M+1M+	7F+2M+1M+	8F+2M+1M+	6F	2F+1M
Strength	(Arabic)=6	(Arabic)=10	(Arabic)=11		=3

It can be seen from the table that the attendance of teachers varies from school to school and in no case all the teachers were present either at the start or at the end of the school. This extreme situation existed among the remote schools. It can also be seen from the table that the lower primary schools in Kerala had predominantly female teachers which from the point of view of education is sound. However, the study revealed that there is a likelihood, as found in the case of two schools, that the female teachers could be on a long leave without any replacement on account of maternity. The Government of Kerala, it seems, has recently increased the maternity leave period from three months to four and a half months.

Most schools in Kerala also have an additional hand in the form of an Arabic teacher where the school caters to Muslim population. The schools make an ingenious use of this teacher who was found to engaging those classes where teachers were on leave. However, the Arabic teachers are not trained under DPEP to use the methodology prescribed by the programme. They may not be able to provide the kind of continuity required in teaching.

"I went to standard III 11.45 a.m. The regular teacher is on maternity leave and the Arabic teacher has been asked to teach the grade. The teacher began the lesson by asking the children if they have seen a circus. The children say "Yes", The teacher repeats the question. Have you really seen a circus? He says there are a lot of animals. Children nods. The teacher says there are so many animals in the circus. He continues and says that the circus troops also travels out of the country. This teacher is making an attempt to teach Malayalam. The

teacher asks, "do you know about the clown in the circus?" The teacher asks the children to describe the cloth of a clown...." (from the diary of the observer, VLPGS, R-I, D-I)

On several occasions, the classes engaged by this teacher were to be repeated by the regular teacher. If trained they can contribute to the children's learning and may prove to provide a solution to the problem of short duration absence of a teacher on several grounds.

A major reason for teachers' not being present at the start of the school seems to be the distance traveled by them. A summary of the information collected from the teachers in this regard has been presented in table below.

**Table 9: Distance Traveled by the Teachers** 

	VGLPS	GMLPS	AKMMLPS	KUPS	%
Less then 1 Km	-	1	-	-	5.26
1-5 kms.	1	3	3	1	42.11
5-10 kms.	4	1	1	2	42.11
10-25 kms.	-	-	1	-	5.26
More than 25 kms.	-	-	-	1	5.26
Average Distance	4.9 kms.	3.3 kms.	5.9 kms.	10.25 kms.	6.09 kms.

Most teachers, except in the tribal school, reside at a distance of 1 to 10 kms from the school. They use the public transport facilities for reaching the school. It is possible that on occasions they might be reaching the school later than expected even though they start from their home sufficiently early as stated by the teachers during their interview. The average distance traveled by a teacher was found to be 6.09 kms. In case of the tribal school, the government has provided housing facilities near the school for all teachers. This should apparently mean that these schools should start right on time since the teachers do not have to commute. This, however, was not the case since on an occasion of school visit were all teachers present at the school and on most of the occasions they were found to remain in their quarters even beyond the starting time of the school. The following field notes and the statements made by the community members during the interview illustrate the same.

"I went to the school around 10.00 a.m. and was talking to the students. The school had not begun ..... the teacher was just getting up from bed. After sometime the teacher came

to the school ..... this teacher started the class at 11.00 a.m. ..... The teacher reveals that they normally teach for about one hour. (observation at VLPS, R1, D1)

This observation is confirmed by the community as indicated in the following excerpt from an interview.

".... on an average out of five days in a week this teacher is here for two days. Our children walk a distance of 8 kms. (From Mulagangal) and may find that the school does not functions".

#### **Combined classes**

Kerala is a state which has provided one teacher for every class. Hence it is claimed that there are no multigrade primary schools in the state. Teacher absenteeism and teacher irregularity in fact makes it necessary that either the classes of teachers who are absent are combined with some other class or attended by some other teacher during the course of teaching in her class. The observations in this study were made in three rounds of two days in each round. During the course of the field visit there was not a single day in any of the schools observed when one or the other class/section was not combined with another. If on some occasions such a class period was one, on other occasions the combined classes were observed throughout the day.

The practice in the KUPS is that when a teacher is absent, a teacher who is present "simultaneously supervises" two classes. Some revision exercise is given to both the classes and a single teacher supervises and corrects the work of children from both the classes. Under such circumstances instruction as planned activity is not found. The principle is that the group is too large for learning and what best could be achieved is of strengthening of already learnt material.

Whereas, learning was made possible even on occasions when a teacher was absent in the AKMMILPS. The general practice in this school was to distribute the children of a class where the teacher is absent to the other two sections of the same class. Since the teachers make a common plan for each section, it was possible to integrate the additional number with the class. The teacher does not resort to mechanical activity but continues with the implementation of the plan which was made collectively by the teachers in the previous week. Even though the difficulty of teaching to a larger group exists, continuity in learning is achieved.

An attempt was made to find out which kind of combination was practiced among the primary schools.

**Table 10: Nature of Combination in Classes** 

Monograde Combination	41 (83.67%)
Multigrade Combination	8 (11.33%)
Combinations involving Standards I/II	32(65.31%)
Combinations involving III/IV	17(34.69%)
Size of the class when combined	44-144 students
Average size of a combined class	67 students

A large number of schools practiced combination of different sections of the same grade. Also there were some occasions when the lower standards of I and II were combined. Depending upon the strength of students the size of class when combined varied from 44 to 144. This, however, was not true of the tribal school which had had a total strength of 49 students from class I to IV. On further analysis it was found that the average size of a combined class was 67.

Considering that the classes combined were more of lower grades and that the average size of a combined class was 67 meant that it was extremely difficult to practice activity based teaching in such classes. The teachers' time and effort was spent in creating a learning environment or in maintaining discipline among the children. Even the teachers who were otherwise practicing the activity based approach suggested by the trainers in the DPEP programme, could not do so at least in the combined classes. The following is a situation to illustrate the same.

"This teacher is finding it difficult to control the class. The first standard has three sections. The Headmistress is in charge of one section. She is always engaged with the office-related work and hence her class is split and each teacher handles one and a half sections. The teachers shout to get the attention of the children. The children do not listen. Then the teacher asks all of them to stand and ------- Two kids were fighting amongst themselves. The teacher makes them to be seated near her. The rest of the activities of this class were done with the students standing. ....... The teacher hits the stick on the table to get the kids to listen ....... She repeats that all children should write but many do not do so. The teacher says frustratedly "I have never seen such children like you". (from Field Notes at KUPS,Round 2)

This difficulty is felt by the teachers also as evident in the following statement of a teacher made during the interview.

Interviewer: Have you received any training on the methodology advocated by the DPEP?

Teacher: Yes. First there was a 5-day training. After that we are having training every now and then.

Interviewer: Did you find the training useful?

Teacher: Yes. It was useful.

Interviewer: Do you find a need for any more training or do you think that you can now use the methodology effectively in the classroom?

Teacher: Now I have some idea of the method. But the problem is only when I am taking combined classes.

Interviewer: Do you have to take any combined classes?

Teacher: Sometimes. Teaching in the combined classes is difficult in DPEP.

#### **Student Attendance**

It can be seen from Table 8 that the attendance of students varied from school to school. It was lowest in the case of the tribal primary school. The government schools which are urban and private schools irrespective of their location were well attended by both boys and girls. The private aided schools were best attended by children. It is possible that the figures available on records, especially of remote schools might not be fully reliable if the situation was one as found in the case of the remote tribal school.

"According to the register there are 12 children. Seven of them have come. The last attendance was taken on the  $18^{th}$  of September. The date today is  $23^{rd}$  September, 1998.....The afternoon class started at 2.20 p.m. ..... The attendance register was filled up and brought forward till the  $22^{nd}$  of this month. The teacher did this during the break time. The teacher seems to be unaware of the date. Today is  $23^{rd}$  and the attendance is marked for  $22^{nd}$ ". (From observation notes, VLPS)

It can also be seen from the table that in the two government schools the attendance of girls was higher than that of boys whereas in the two private schools it was vice-versa.

Table 11: Student Attendance Across Schools (in percentage)

	VGLPS	GMLPS	AKMMLPS	KUPS	VLPS	TOTAL
No. of observations	8	15	12	10	6	45
Boys	70.80	76.22	88.37	89.79	65.33	80.05
Girls	72.55	88.03	81.52	82.86	60.12	81.24
Total	71.68	82.13	82.45	86.33	62.72	80.64

**Table 12: Class wise Attendance** (in percentage)

	No. of observations	Boys	Girls	Total
Std. I	17	74.44	72.77	73.61
Std. II	16	81.89	77.21	79.55
Std. III	14	74.10	84.88	79.49
Std. IV	14	77.30	76.60	76.95

Table 9 provides the class wise attendance in percentages. The attendance figures of VLPS have been left out since the figures in that school were extreme and an exception and hence would have adversely affected the average value.

When the attendance of children was analysed class-wise, it was found that the attendance figures for standard I were the lowest with an average attendance of 77.30% and that for standard II were the highest with an average of 79.55%. It is believed that the student attendance is influenced by the seasonal variations especially the period connected with agriculture and monsoon. Even though the present study was not conducted to represent all the seasons during and academic calendar, the data were analysed round-wise which happened over a period of seven months.

**Table 13: Student Attendance during three Rounds** 

	Round I (Sept.)	Round II (Dec.)	Round III (Feb./March)
No. Of Observations	17	94	14
Boys	78.13%	83.44%	76.14%
Girls	70.97%	87.76%	77.04%
Total	74.55%	85.60%	76.59%

It was found that the attendance figures for September and March were lower than those for December. Even though it is difficult to confirm from these figures that the seasons influence school attendance, it may not be ruled out either.

#### **Enrollment and Retention**

Kerala is a highly literate state where a high degree of demand for education exists, be it in city, town, village or interior settlement. Hence, school enrollment and retention figures are very high in the state.

Even though the parents favour the education of their children, there seems to be an increasing preference shown for English medium schools than the Malayalam medium schools. As a result, there has been a mushrooming of English medium primary schools even in rural areas and many of them are yet to obtain recognition by the Department of Education. Incidentally, English is taught as a language in standard IV.

Several Malayalam medium schools have witnessed a drop in the enrollment figures or the strength of the school. Some of them had to close down a section and/or terminate a teacher. In the AKMMLP school, for example, the drop in student strength lead to the closure of a section in Std. III and a teacher who had paid a huge sum for appointment lost his job. The following statement made by the Headmaster of the KUPS also reveal the same.

"When I took over as the manager of the school, there were only 700 children (With my efforts) the strength gradually increased to 1400. However, with the introduction of this new method (as advocated in the DPEP) the strength reduced to 936".

The attitude of the community and in particular of the parents who believe that good education means "formalised instruction, note learning, seeking marks in well structured evaluation system" find that the introduction of the activity based approach (of DPEP) in the government and private management schools is a ploy to further the gap between the rich and the poor. They would like the child to demonstrate progress which they link closely with reading and writing. Such a progress, according to them, was visible in the children attending Malayalam medium schools before the introduction of activity based joyful learning and which is visible now in the children attending English medium schools. The absence of home work bothers a large number of parents and teachers. The following excerpts from interview with teachers illustrates this feeling:

- T1: In Kerala, the people are very well aware of the educational system (importance of education). They will do anything for their child's education. We had a traditional system which we have been following. Now that the DPEP is implemented students do not have any homework. My son is in V standard. He has nothing to do at home. The other day his mother asked him to write and the boy says that he can study just by reading. Then what will the parent think? (That) most probably nothing is taught in the school.
- *I*: Do you mean that not much scope is given for the development of writing skill in children?
- T1: My son did III standard from her and when he was in IV the DPEP scheme was implemented (now he is in V). He was above average. Now his standard (level of performance) is deteriorating. Last year he attended scholarship examination and the questions do not pertain to DPEP syllabus. This naturally causes frustration. In such conditions, parents prefer private English medium schools to DPEP schools .......
- ..... In the English medium schools they give a lot of homework and the students after coming home are engaged in studies every time (every day). The parents have to punish them and make them study. But see the condition of DPEP schools. They have nothing to study. Every time they play.
- 2. T: In older times (before implementation of DPEP) when we were teaching meanings of malayalam words, children used to study (learn by heart) by reading at home. But now they get only the hearing knowledge (listening experience). They may not study at home. They and their parents both do not know what they have to study ..... They (do) have interest since there are a lot of stories. The method must be implemented all over Kerala (in all schools). As an experiment, it should not be imposed on the ordinary (Malayalam medium) schools (only). Then there is no use.

The changes brought about in the instructional approach has not only influenced the imigration of students from Malayalam medium to English medium schools but it has also influenced the attendance of children in some schools and the way absenteeism is viewed by the parents as evident in the reaction of this teacher.

T: We don't want old methods. This is a very good method. After one week, students start coming in front of the teacher without fear. In that respect it is very good .....

T: their mothers think that if a child is absent for a day then there is no loss. Because only songs and games are there. But this was not the case in the previous years, whenever they (the child) lost a day they (the parents) thought that it was a great loss. This is one change that we can see. Earlier, parents used to compel the children to attend the school even if they had fever, But now things are quite different. If a child did not want to go to the school the parents do not mind it since what happens in the school is also the same (as at home) – playing and singing.

T: ...... The parents believe that the children in our school do not study. At the same time, the children in the English medium School have a lot of work. Suppose a child in one family is in Malayalam medium school and his neighbour is in the English medium school. The child attending the English medium school does a lot of work at home and the one attending the Malayalam medium school does not. Definitely their parents will compare. That is why they feel that their wards do not study properly ..... that is why the English medium school also must follow DPEP approach.

The AKMMLP School, for example, is recognised as the best school in the Tharur Panchayat. Even in this school 10-15 percent children are irregular. According to the HM of the school, during the agricultural season and the rainy season i.e., in October-November and June-July there is small stream which gets filled. Children are not able to cross this stream. Because of this, there is a dip in the attendance of children during these months.

The DPEP has provided volunteers for conducting enrollment drives. Such a drive is needed in remote areas where children are not yet enrolled. This is particularly true of the tribal areas of the district of Palakkad. After completing their primary schooling, the children are to attend the upper primary education which starts at standard V in the state. There seems to be a peculiar phenomenon of re-enrollment after completion of the IV standard, in the tribal Tamil medium school. There were at least four such children who had re-enrolled themselves. If on the one hand, their poor competence in reading and writing made them unacceptable in a school with higher classes, the lure of incentive schemes, especially monetary gain, encouraged the parents to send them back into the primary school. This, however, was not done with great joy and the parents were concerned that their children are unable to complete their schooling and are unable to read and write even after four years of schooling.

## **Daily Scheduling of Teaching**

As mentioned earlier all schools in the district do not have the same time for starting or closing. If the government schools follow a 10.00 a.m. to 4.00 p.m. timing, the private management schools are found to start earlier than 10.00 a.m. and run some times beyond 4.00 p.m. However, for the sake of comparability a 10.00 a.m. to 3.15 p.m. duration has been analysed for finding out the internal timetable of the school. Further, the schools were also found to differ in terms of the duration of a class period. A 45 minutes duration was considered for a class period.

Table 14: The timetable followed by the VGLPS during the days of observation

	I	II	III	IV
10.00-10.45	Malayalam	Malayalam	Malayalam	Maths
10.45-11.30	Maths	Malayalam	Malayalam (Arabic Tr.)	EVS
11.45-12-30	-	EVS	Malayalam	Health, EVS
02.00-02.45	EVS	Maths	EVS	EVS
02.45-03.15	Singling	Maths	Arabic Tr. Writing	Maths

Table 15: The timetable followed by the GMLPS during the days of observation

	I	II	III	IV
10.00-10.45	Malayalam	Malayalam	EVS	Malayalam
10.45-11.30	Maths	EVS	Maths	Malayalam
11.45-01.00	Song Malayalam	EVS	Maths	Maths
02.00-02.45	Rhymes	EVS	Story writing	Maths
02.45-03.15	Singling	Maths	Maths	

Table 16: The timetable followed by the KUPS during the days of observation

	I	II	III	IV
10.00-10.45	Malayalam	Malayalam	Maths	Malayalam
10.45-11.30	Maths	Malayalam	Maths	EVS
11.45-01.00	Maths	Malayalam	Maths	Health, EVS
02.00-02.45	Writing	Malayalam	Malayalam	Malayalam
02.45-03.15	Play, Song, Dance	Indl. Work	Malayalam writing	Maths

Note: School starts before 10.00 a.m. and runs beyond 3.15 p.m.

Table 17: The timetable followed by the AKMMLPS during the days of observation

	I	II	III	IV
10.00-10.45	Malayalam	Malayalam	Malayalam	Malayalam
10.45-11.30	Malayalam	Malayalam	Indl. Work	-
11.45-01.00	-	EVS	Malayalam	Health, EVS
02.00-02.45	Malayalam	Maths	Maths	-
02.45-03.15	Malayalam	Maths	Maths	Maths

The primary schools in the district of Palakkad start with the teaching of Malayalam in all grades. The duration of this period varies from 45 minutes to two hours. Even though there is no consistency, the forenoon is preferred for the teaching of EVS whereas the afternoon for the teaching of mathematics. But there are occasions when mathematics was taught in the forenoon session itself. Certain individual based work such as writing tables or solving problems are found to be done during the last class period. This may particularly be true for those situations when the children are likely to be inattentive or non-participative in any other kind of activities.

Malayalam is taught for a relatively longer duration during the day followed by mathematics and environmental studies. If one examines the situation across grades, it may be found that standard I children spend more time on Malayalam as compared to those in standard IV, who seem to spend more time on mathematics. The later part towards the end of the forenoon and the afternoon sessions, one finds that the children are engaged in either lighter activity such as play, singing and dancing or are engaged in mechanical activities such as writing, problem solving or such other exercises. However, this is not followed uniformly

either within or across the schools. It was noticed that the children are put on mechanical or repetitive exercises when the regular teacher of the class is not available to them, if they belong to higher classes. On the contrary one finds that the children in the lower classes are likely to be engaged in playing or singing or are kept idle if their teacher is not available. There were hardly any instances of children present in their class and kept totally idling if they are attending private management schools, whereas the children who attend the government primary school, throughout their primary classes will have found themselves to be sitting idle in the class on numerous occasions.

At the primary level, as per the curriculum, learning experiences are to be organised in the non-cognitive areas of Health and Physical Education, Art Education and Work Experience. It was observed that these areas are generally neglected in the scheduling of instructional time. If some schools had not made any provision for them in the transaction, others had considered it sufficient if these classes are held occasionally. *In the KUPS, for example, it was reported that 5 minutes are reduced from other periods to accommodate a 15 minute Art Education class on certain days.* 

#### **Role of the Headmistress**

Headmistress of a primary school is responsible for all the activities that happen in the school. As a manager she designs the time schedule, supervises instructional activities, interacts with the community, arranges meeting of school and community organisations and administers the school officially and organisationally. The Headmistress is the most experienced among the teachers by virtue of her length of service as a teacher. The DPEP has envisaged a very active and supportive role for a Headmistress in ensuring Universalisation of Elementary Education in terms of enrolment, retention and achievement. Being a teacher, the Headmistress is also to undertake teaching in one of the classes. It was noticed that with respect to teaching there are two types of Headmistress working in the primary schools. Those who consider that administration is their primary responsibility and the others who want to but are unable to attend to teaching regularly. With respect to punctuality it was observed that a Headmistress is no different from the teachers. She also comes late, goes early or takes leave. When the Headmistress is present in the school she conducts assembly, oversees the lesson notes prepared by teachers allocates work other than teaching to other teachers, supervises arrangements for activities of the school such as meetings of PTA etc.,

undertakes liason work with community in improving the school facilities and implementation of incentive schemes such as mid-day meal. It is found that due to her belief that she is an administrator and not an academic, the Headmistress knowingly or unknowingly adversely influences the functioning of the school and learning there in. For example, the class, which is assigned to the Headmistress, is generally found to be either looked after by some other teacher or is involved in rote learning and repetitive activities for a substantial time in the day since they do not require the presence of the teacher. The Headmistress also unwittingly, is an interruption to a class that is otherwise involved in learning. She peeps into or engages in talking to teachers in the middle of the class. This is primarily because of the thinking that the consultation, which she does with a teacher, is more important than the learning of the children.

Even though this is a general trend, there are exceptions as well. Such exceptions come from the private management schools. In the private management schools the Headmistress expects greater discipline amongst children and teachers and hence is not found interfering with a class. She looks into the plans prepared by the teachers, even though is more often mechanically done. Following are some instances to illustrated the above. The observation was made during a two-hour span of time.

"Reached the school at 10.00 a.m. Two teachers have come by 10.00 a.m. ..... The Headmistress comes at 10.30 a.m. ..... The Headmistress is just sitting and chatting with the third standard children ..... The Headmistress disappears from standard III. The Headmistress returns to class III and takes attendance..... The Headmistress is sitting with a stick. She has given some writing work to keep the children engage. Later the peon comes and is in conversation with the Headmistress. She leaves the class and comes to her room..... The Headmistress comes back to class III and is asking a child to come in front and tell something. ..... The II standard is combined with the III to relieve the Headmistress to attend to office work and also take charge of the III standard. The Headmistress again went back to her room..... The III standard children are once again left alone. The Headmistress is not supervising the work given and the children do what they want to. Some children are watching the IV standard, where a mathematics lesson was being taken (from the Observer's diary, VGLPS, ROUND 1 DAY 1).

### **SECTION III**

### AN ANALYSIS OF CLASSROOM PROCESSES

### **Planning of Instructional Activities**

If the Headmistress is responsible for the institutional planning, the teachers are to undertake instructional planning in teaching. Under DPEP it is envisaged that teachers will regularly plan the learning exercises to be provided to the children. The provision made to ensure this is the formation of the School Resource Group (it has been recently renamed as SSG since SRG can also mean State Resource Group). According to the trainers the last hour of the day is meant for planning and preparation for teaching on the next day. Apart from this the weekly group meeting at the school level and monthly meeting at the cluster level are used for planning. The BRC trainers have an active monitoring and guidance function to perform in such planning.

It was found that the sincerity in planning instructional activities was more prevalent among the BRC trainers who regularly visit the schools and undertake planning exercises with the teachers than that was found in the teachers. Except in two schools, planning was not regularly undertaken by the teachers and there was hardly any coordination between what happened in one section and the other of the same grade on a specific school day. Even in those, for organizational reasons, the classes were divided into more than one section if they belonged to one grade and the instructional inputs had some comparability if not exactly similar. The following table shows the time during the school day when the planning was done by the teachers.

**Table 18: Time when Planning is done by the Teachers** 

In between Class Periods	44.08%
(Children given some mechanical work)	
At the end of the School (Last period)	35.80%
At home	20.12%

It can be seen from the above table that the teachers generally have no specific time when they undertook planning of instructional activities. It is done usually during the school hours thereby affecting instructional activities. In two schools, however, the teachers either undertook planning at the end of the day or were utilising after school hours for planning. Even though it is in the interest of education of children to have lady teachers at primary level, it is found that they are unable to undertake school related work at their homes since they have several types of tasks to attend to. Hence it may be necessary to ensure that the instructional interaction period with the children is little shorter than the actual school hours. It is also found that the trainers are unable to impress upon the teachers or the Headmistress for such a provision and some have adjusted to this reality by undertaking planning with the teachers concerned during the class hours itself. There are instances when planning and teacher work has assumed greater importance than effective use of instructional time for learning by children. Even though planning was done by the teachers for effective instruction, the time spent on planning at school is a loss of active instructional time

#### An Estimation of the Loss of Instructional Time

In the state of Kerala, primary curriculum consists four academic years of shooling. In an academic year, a minimum number of weeks of working are prescribed for the schools and every week has six working days. Except for Saturdays, a day's work is divided in to two sessions, before lunch break and after. Four class periods are to be organised in each of the two sessions. Hence, the instructional time in a day consists of eight class periods.

Any objective based learning at primary level requires the mediation of teacher in many ways like imparting direct instruction, facilitating group work and providing feedback on individual work. The time given by the teacher to all such activities constitutes *opportunity time*. Looked at differently, if all the eight class periods were to be organised for 'active instruction', then the opportunity time available to the children for learning is eight class periods. Hence, *a loss of instructional time for a student means a reduction in the opportunity time available to him*. This basic parameter of school effectiveness decides the upper limits of quantifiable school outcomes. Actual outcomes within this limit depend upon how effectively the opportunity time was utilised. Hence, opportunity time/instructional time becomes a structural factor.

It was mentioned earlier that a total of six school days were spent in each of the sampled schools in this study. Considering that a school day means six periods, for a class, if all the forty eight periods structurally available during the six days were to be engaged for instructional purposes, then the instructional time for the class will be forty eight periods. In other words, the loss of instructional time would be 'zero'.

Estimation of opportunity time has been made at two levels in this study. In the first level, a class period has been taken as a unit. Here, estimation of the loss of instructional time for the duration of a period, a session and a day has been made for each of the four primary classes in the five schools observed. The table below gives a summary of the loss of instructional time within a day. Average loss in a day is calculated by dividing the total periods lost during the period of observation by the total periods structurally available, which is forty eight periods for the six school days observed. At the second level, the analysis has been made by taking time in minutes as the unit. For the sake of analysis three time ranges, less than 5 minutes, 5 to 10 minutes and 10 to 15 minutes were used. They were subsequently summed for each class in the five schools.

The meaning of the five categories used for reconstruction of the observational data has been clarified in the illustrations given below.

### No teacher and no work for a class period:

The incharge H.M. who is a master has gone to the office to attend to some paper work and has not returned yet. He was not there even on the previous day that I observed the school. On conversation with the members of the community I was informed that the teacher is busy with the harvesting of his crops. It appears that the male teachers rather than the female teachers do not attend to school during the peak agricultural seasons. They apply leave or go from the school on the pretext of some office work.



### **INSERT TABLE HERE**

### Play/Activity unmonitored:

The children of  $2^{nd}$  standard are walking around in the classroom. It appears that the teacher is not in the classroom. The  $2^{nd}$  standard and the  $4^{th}$  standard in that classroom are doing the same activity. The children of standard 4 (one Section) and standard 2 have stopped doing any serious work.

In the afternoon I went to standard III which is a combined class. The children are playing and there is no teacher in the class..... The teacher asks them to sit down, read a story, and frame 5 questions..... There is only one group of children who have a storybook and amidst talking are also doing the activity.

### Engagement activity for a class period:

III Standard – the teacher has written a passage on the blackboard. The children were asked to frame question and answers. The written work was not corrected and the kids in general wrote on their own. Since it was the Arabic exam in Standard III, the remaining children were given this activity to keep them engaged. During the mid-day meals the teachers swerve lunch to the students. Most of the children in the school are eligible for the mid-day meals. From the past year, what ever be the amount of rice given the mean is shared among all kinds who volunteer to have the food.

### **Engagement Activity**

The class II is combined since there is a meeting and the pre-primary section is shifted out of the new hall to one of the classrooms of standard II. While I enter the class the teacher had given the children a list of animals and birds and they were asked to classify them based on the number of legs that they have. Some kids are looking at the chart and drawing. The teacher asks the child to read out the classification that they had done. While the child is reading there is so much of noise that the teacher had to constantly engage in disciplining the children. The children do not listen. The teacher says that in combined class group work is not possible. The teacher asks the students to keep the state down and all quietly. She says I will call one child to come up and tell a story, the others will have to listen. The children are asked to fold their hands. Shruthi is asked to tell the story and she starts off.

#### **Engagement Activity**

After 3.15 the children return to the class, but this class is also combined and the teachers have a song, dance or story telling session. Either the teachers tell the story or they make the children narrate a story sing a song or dance.

### Unplanned activity

I went to standard I at 11.00 a.m. The 1<sup>st</sup> Standard is a combined section of three classes A, B and C. There is only one teacher who has come in the 1<sup>st</sup> standard. The teacher is narrating a story. The teacher asks the children what animals have they seen? The children say snake, hen, monkey, tiger, parrot, etc. The teacher asks what is the national bird. One child said it was peacock. While the teacher is narrating the story another child asks the teacher to repeat the previous line. The teacher says that the child is crying in the story. She asks them how did the child cry. Is it happily or sadly? The teacher asks the children to demonstrate how to cry. All the children cry together. The teacher proceeds with the story

and says the mother fainted. The mother took a stick and hit the moon, which brings out the child. E moon became bigger and bigger and suddenly the teacher shifts to the birthday. I did not understand why the shift was made. She asked the children what do you do for your birthdays. The children do not answer. The teacher says that we give sweets to all children on our birthday and then she shifts to the story and asks one day when the moon is big and full we call that day Pournami. What can we name the moon? The children teacher suggests the name Harish. One child said the moon could be named Vimala. The teacher says after the full moon the next day we do not see the moon and then she asked the children to draw the moon in their slate. The students ask if they have to draw a big moon or a small one. Some children said that they do not have a slate. The teacher asks them to draw it in their book.

### Unplanned Activity for a class period

After this the teacher is not able to engage the class and was trying to draw me into conversation. She wanted to know how long will I stay in her class. The actual class was for 15 minutes. The children were distracted and started playing among themselves in small groups. The teacher explains that the children are weak in fundamentals, hence she is not able to cope with the portion of class IV. The teacher said that she would continue the same lesson the next period. But for whatever reason, the teacher did not engage in teaching for the rest of the time that I was there in the class.

The following estimations of the loss of instructional time have been made based on the two tables given above.

Average loss in the government schools: More than one out of every three days (.335)

Average loss in the pvt-aided schools: Less than one out of every twenty days (.045)

Average loss in the tribal school: More than two out of every five days (.411)

It can be seen from the data above that the maximum loss of instructional time happens in the remote tribal schools of the district. The loss of time is also very high in the government schools. The scenario in the private aided schools is far better since only one in twenty days is lost.

Further analysis of the data reveled that the loss of instructional time across grades was more or less similar. Among the grades the loss was maximum in standard I in both government and private schools. In the government schools, the classes, which were to be engaged by the HM, suffered the maximum loss of instructional time.

An analysis of the reasons reveals that, the most common reason for large scale loss of instructional time i.e. in periods, sessions and days was either the delayed start of the school or the early closure of the school or that the non availability of the teacher to the students of a particular class. Engaging the children in some unmonitored name sake activity

and unmonitored classrooms where children were engaged in play than learning were the other major reasons.

An estimation of the loss of instructional time in classes in which the teacher is present has also been made in this study as mentioned earlier. An analysis of the reasons for such losses reveals that, in both government and private schools alike, engagement activities account for a maximum loss and almost an equal amount of time was lost in the government schools when the teacher was present but the children are not provided with any instructional input. The incidence of this reason was very less in the private aided schools.

### **Starting of the Class**

Starting of a learning episode assumes importance from the point of view of facilitating the construction of knowledge by the children. Children need to relate the new experiences to their existing knowledge or recognising the relevance of the experience in the form of an activity in relation to their own needs. A learning experience provided abruptly does not reflect the thinking that the children need to be readied for undergoing the experience. From the point of view of the participation of the children, the starting affects their interest and motivation.

The morning first period of the school after the assembly is meant for taking attendance of the children. As soon as the teacher goes into the classroom she takes the attendance and passes on the information either directly or through a student to the Headmistress who needs to instruct the cook about the number of meals to be prepared for mid-day meal. This is followed by singing, which varies from I to III, whereas on other occasions the teacher employs other ways of starting the class. Given below is an instance when a class starts with a song.

(Teacher takes attendance)

- *T:* How many months are there in a year?
- S: Students answers are different -3, 6, 12 .....
- T: Which are they? January,
- S: February, March.
- T: March?
- S: April, May, June, July, August, October?
- T: What? September
- S: September, October, November, December.
- *T: Now, how many?*
- S: Twelve.
- T: We can sing a song about, how many months are there in a year. (Following this Teacher sings a song about months. Children repeat).

```
T: January; came, Window opened.
S: " " "
T: New year is coming.
S: " " "
T: It will come soon.
S: " "
T: Silk covered February
S: " "
```

Teacher sings the entire song. Each line was repeated by the students.

It is found that songs are the most common ways for starting a class if what is taught is Malayalam or EVS. In some cases mathematics classes also began with songs. In some schools, the children read out the diary they have written about their experiences of the previous day. Some times the teacher goes round the class and looks into these diaries. The teacher gives instructions about an activity and organizes the same. This is when the teacher is implementing what she has planned. There are occasions, however, when the teacher uses some additional activities such as clapping, hand movement and sit-stand for making the children ready. It was found that the teachers do not use songs or warm up exercises as a preamble to work that the children have to do if the teacher was not a regular teacher of that class and had no instructional plan to implement.

There were mainly five ways in which the teachers in Palakkad district started the learning episode in a class. It may be mentioned that, the learning episode is considered as beginning only after the teacher has attended to the school routines such as cleaning the class, singing, clapping, and taking the class attendance. The following instances illustrate what is meant by each of these categories.

The instance given below was categorised as 'beginning a learning episode abruptly'

(teacher takes the attendance)

- T: Yes, Now all of you take your Malayalam Notebooks.
- T: Get it soon ..... Take your pen and book
- T: Repeats the same.
- S: Yes, we took it (in chorus).
- T: Now, I am going to write some lines on the board. Read it carefully. I won't be reading it to you and don't take it down. O.K. I after reading it do as I say.
- S: (There is a murmur in the class).

### **INSERT TABLE BELOW**

The categories mentioned are not exclusive. On most occasions, the beginning of a learning episode has been included in more than one category. Given below is an instance when the beginning has been categorised as abrupt and with drilling. It was considered drilling because the lesson, apparently, was taught earlier.

I went to standard IIC. The teacher, Ananda, starts the class with a song. The strength of the class is 12/14 boys and 10/15 girls. The teacher walks up and down in front of the class and sings a song line by line. The children repeat it after the teacher. After the song, the teacher asks all the children to take the next book. The topic for the day is `Among the flowers, which is beautiful''. The teacher writes the heading of the lesson on the board. One child says that this lesson is already taken. The teacher brushes it aside and says it was a different lesson. The child insists that the lesson was taken previously. The teacher is annoyed, ignores the boy and starts the lesson. The teacher reads the lesson aloud and the children follow the lesson in the textbook.

On several occasions, the teachers started the episode through informal questions. Some instances of starting a lesson through informal questions were such that the questions, though asked in an informal manner, were not connected logically. This was observed in the tribal Tamil medium school. An instance is given below.

- T: Look here, if I ask you to tell about you, what will you say?
- S: (No response)
- T: Do see here. So what will you say?
- S: (No response)
- T: We will say father's name. What else can we say? We can say mother's name. (Students are gazing)
- T: If we have to say about cow what will we say?
- *S*: (*No response*)
- *T*: *So*, *if I say write five sentences about the cow what will we write?*
- S: (No response)
- T: What is Cow?
- S: The Cow gives us milk (Teacher writes on the board)
- *T: Is Cow a human being?*

All: No.

*T:* Then what is Cow?

Some children: It is milk

- T: Yes, it gives us milk. But what is a Cow?
- S: (No response)
- T: So the Cow is not a human being. It is an animal. (He writes on the board Cow is an animal. This continues).
- *T:* Do you know the two types of animals?
- *S:* (*No response*)
- T: The two types of animals are wild and domestic animals. (The lesson continues).

What is desirable, while starting a learning episode, is that the learners are provided with a context for learning. All occasions of informal questioning were not providing context

as well. An instance when the teacher started the lesson through informal questions and also provided a context is given below.

In the afternoon, I went to standard II. There are 11/15 boys and 23/29 girls. The teacher asks all children to go and keep their water bags in its place. The teacher calls the attendance in the afternoon. The children respond to the teacher. The teacher asks why have you torn the papers and thrown it all over the classroom. She asked the children to keep away the water bags again. The teacher checks with the students the date, month and year. The children respond. The teacher draws the attention of the children to the black board. She points out to the date and finds out what each number corresponds to. The teacher asks the children what else do you see when you look into a calendar. The children do not respond. The teacher encourages them and tells it is okay if you are wrong. Why don't you attempt to answer. Hesitatingly, one girl said that the girl also has the Malayalam months and English months. The teacher also shows that the dates and week- days are also printed. The teacher illustrates it with an example. If your mother says that Vishnu's birthday is March 29, how does she know it so perfectly? What else is written in the calendar? The children do not respond. The teacher says, are you not familiar about the Astrological Stars? Don't you know your stars? The children are not very sure. The teacher points out the star and corresponding dates. The children count the 28 stars. The teacher says that each one of us will be born on one of the stars. The teacher asks Suchitra what her star is. She says "she is Makham in the month of Madam". The teacher asks how do we find out. The children say, we use the calendar. She instructs the children since they do not know that star and month, go and ask their mother and come and tell her tomorrow. The teacher asks are you familiar with the Malayalam months. One boy stands and tells the Malayalam months. The teacher asks which Malayalam month is this. The children are not sure. The teacher says that this is Kumbha Masam. The teacher says that in certain months there are a lot of festivals. She asks the children, which is the festival that comes in the month of Madam. The children say it is Vishu. The teacher asks what else happens during that festival. The children say we get "kaineettam". The teacher asks what will you do with that money. The children say that they will keep it for the temple festival. The teacher asks the student that if they have seen the moon yesterday. The children say "yes" but not very sure. The teacher asks the shape of the moon. The children are not sure and the teacher says it is round as "Dosa". She goes on to ask when do we see the full moon. One child said it is Pournima or Veluthavave. The teacher says does not your grand mother fast during Ekadashi. The children are not very sure. She comes back to the original topic and tells that all this information is there in the calendar. The teacher asks if all of them have a calendar at home. The children nod their heads. The teacher asks how many months are there in English. The children say they are twelve. Tell me what they are. The children do not answer. The teacher starts January and the children continue and call out all the other months of the year. The teacher asks does any body know this song about the months of the year completely. The children sang the song. The teacher corrects the children as they sang. The children, on their own, stand that is a few of them and start singing. The teacher also sings with the children. The children are not sure of the words. The teacher knows the song by heart. The teacher asks the children to tell the months. The children use their fingers and call out the months. The teacher writes the month's name on the board. The teacher writes the heading English months and then starts writing January, February, etc. The children read the months aloud as the teacher writes on the board. She numbers the months as she writers. Some children are standing over enthusiastically calling out the months. The teacher says, now I will divide you all into groups and give a calendar to each group. The teacher makes the group leaders and later asks them to call out the numbers.

She says call out the numbers soon. She makes them to sit according to groups. She instructs them to look into the calendar and tell if all months have the same number of days.

On some occasions, teachers provided context to a lesson through story and songs as well. The following instances illustrate this.

### Introduction by providing context through story:

(*Teacher takes the attendance*)

- T: Do you bring money for stamps? Any one? Adjust your seat.
- T: La here, listen
- *T:* What is the day today? Is it Monday? What is the date?
- S: Right
- T: Sit properly. Late comers, give your attendance.
- T: Sit there. Sit properly. You sit there.
- S: (Students make noise).
- T: Try to sit properly. I want to see. Try to behave as good students. Stand up all.
- T: Do not carry any things: Stand up all Raise your hands, Down ..... Sit down, stand up, clap your hands- one time. Are you O.K.?
- *S*; *This is rotating.*
- T: That is cassette recording, In order to record your noise.
- T: Sit properly.
- T: Now, we are going to tell a story.
- T: A Kind, Do you want to name the King?
- S: Yes
- T: You must give a name for king.
- *S: Queen .....*
- T: We can select one of your name. What is your suggestion? "Rajesh". Yes Rajesh King. That is your suggestion. King Rajesh.
- T: Rajesh King, after meals, try to sleep. Do you like the disturbance at the time of sleeping? Sit properly.
- *T:* What is the name of the King?

(Students talk)

- T: Is Kind an ordinary person like us?
- *S*: *NO*.
- *T:* Why don't you answer anything? Do you see film?
- T: Child, sit properly. You can dance and sing when I am giving permission. Now no one is here to see your play.
- *T*: (continues the story) What is the word for King's sleep?
- S: Sleep
- T: King's sleep is known as "Palliyurakkam". As that time king engaged one person. This person has a responsibility that nobody enters the King's room with complaint while sleeping. Do you know who is the person here?
- *S*: (not clear)
- T: A monkey, he is the security person.
- T: Do you know, what is the name of that monkey? "Chemban"

# Introduction by providing context through Song:

(Attendance is taken)
T: Do you know what is the date today?
S: 18.9.98.
T: Today we will sing a song.
S: Yes
T: Do you like songs?
S: Yes
T: You should tell what you understood from the song.
T: Velli padasarangalumayi, sing
S: " "
T: Tulli Marinjhukalichudum
S: " "
T: Tiramalkale Ningalayi
S " " "
T: Kalikalitharu Padipithu
S: " " "
T: I will sing once more. Repeat one line
S; Students repeat one line
T: Repeats second line
S: Repeat second line
T: Repeats third line.
S: Repeats third line
T: Repeats fourth line
S: Repeats fourth line
T: Cherukatlil Kaliyadanum
S: " " "
T: Vankathil Kaliyadanum
S: " " "
T: Singh the whole song
S; Following the teachers, repeats every line.
T: Did you like the song?
S: Yes.
T: Have you heard about it?
S; I have seen.
S: I have felt afraid about it.
T: Here, a child like you is singing. From where is he singing?
S: He is near the sea.
T: Yes, he is near the sea. To whom he is asking questions?
S: To the sea.
T: It is to the waves.
T: Have any one seen sea?
S: Yes, I have seen.
T: Did you see the waves approaching the shore?
S: Yes, I have seen.

T: Isn't it nice to see the sea and waves? Isn't it good to see the waves during sunset? So,

what is said about in this song.

S; About the sea.

*S:* The child is asking questions to the waves.

T: Do you know how to write Kadal (Sea)?

S: Yes.

T: Do you know what she is writing? Kadal.

(The lesson continues)

A lesson beginning with introductory remarks is given below.

T: When you come to school by walking, you can see a varieties of plants, Isn't it? – small plants, big ones, big trees, bushes, shrubs, etc. Now you tell what kinds of trees you saw. We use some fruits or leaves of some of those plants as food. Isn't it? There will be some plants which are not used as food. Some unwanted plants. We can use the wood also for various purposes. What can be made?

S: Palm

*T: What for?* 

S: To make pillars.

T: Yes

S: Cot.

T: Yes, cot can be made, the?

S: Where?

T: Tell where can we use it.

S: As support for roofs.

T: Yes, " ", Then? What else?

T: Frames, Windows etc. We can make many things.

(Lesson continues).

The other ways in which the learning episodes began were through activities and through problems. Starting a lesson with an activity or a problem could precede with an attempt to contextualise or may be organised abruptly. Following are some instances when the lessons began with activity or problem.

1.In the afternoon I went to Standard 1. The teacher has divided the children in two groups. The teacher writes numbers on each child's slate and the children look into the slate and recognize the numbers. The children are asked to sit in groups based on the numbers written on the slate.

2. T: I have placed here the thing you wish to by. You can bring your money and bye it. Understood. You have to calculate the price.

S: Yes

T: Bag - Rs. 5

Book - Rs. 1

Shoes - Rs. 1

Slate - Rs. 1

Umbrella – Rs. 2

3. Teacher says that you are on a journey and you have to reach a destination. But there are four devils on the way and each one poses a question, which has to be answered to go ahead. Teacher says that if the questions asked by the first devil is answered, then you can

cross and proceed. One the way you will come across the second devil, who will ask the second question. When you answer the fourth question you can reach the destination.

The questions are in the form of graded subtraction questions, viz.,

7438 6425 9520 8000 - 3216 - 2536 - 3592 - 5492

Teacher calls on Sagina to solve the problem.

There were also instances when a learning episode began with a follow-up of an assignment given in the previous class or on previous day.

The first Standard teacher is sweeping the classroom and she has asked the children to play outside. And within 15 minutes the classroom is clean. The children say Namaste and sit down. The teacher asks the date and the children tell the correct date. The children are asked to take the count. The teacher remembers who are the children who have not done the homework that she would hit them if they come to class without doing the homework. She does not sound rude but is very firm.

The data presented in the table reveals that, the most often the classes began abruptly, even though the incidence of such a beginning was less in the private schools. Apart from abrupt beginning, the classes in the schools of Palakkad district began with an activity. This, incidentally, is an expectation of the trainers from the teachers. In this regard, the tribal school was different. In this school there were no activities at all. Rather than starting abruptly with an activity, the teachers in the tribal school started their classes with informal questions. Lessons beginning with follow-up and recapitulation were more in the private aided schools. The least probable way of starting a class, though the most desirable, was by providing a context.

An analysis of the starting of the class across subjects reveals that, irrespective of the subject being taught, the classes started abruptly. The teachers did not use informal questions to begin a mathematics class as much as they did so in the Malayalam and EVS classes. Also, the teachers, while teaching EVS did not start with reading and class work as much as they did it in Malayalam and mathematics. The incidence of starting a mathematics class by providing context was less than that of Malayalam and EVS.

### **Experiential Learning**

Primary education till the implementation of DPEP was considered to be mechanical, full of rote learning and devoid of the life experiences of children. Hence, a motto of the methodology advocated by the DPEP is to make learning 'experience based'. This seems to be sound both ideologically and psychologically since it takes into account the

'environmental' and the 'developmental' contexts of primary education. 'Learning for life' and not 'learning for examination' is the concern.

In the DPEP methodology, the child is to be provided with the designed experiences, usually in the form of activities, to participate and learn. In this methodology, the emphasis is more on the 'doing' by children and less on 'listening' and 'mechanical repetition' of an expected behaviour. Teacher's role here is not 'proactive' but 'facilitative'. The methodology of experiential learning is child centred and not teacher centred. Any experience and every experience may not be suitable for learning on all occasions. Its appropriateness is assessed in terms of its 'content' and 'organisation'. It was found in this study that the activities designed were generally suitable to the children as far as the content was concerned. However, every lesson was not activity based. There were instances when a teacher was absent or was otherwise preoccupied and some other teacher had to organise learning, the approach was not based on activity which is in sequence to the earlier activity. This was found less in private aided schools.

Experiential learning is not merely providing experiences to the learners. It could also be helping a learner to relate the present knowledge with the experiences available outside the classroom or to the general life experiences of children of a particular age group. Considerable efforts are being made by the teachers to ensure that the experiences provided to the learners are relevant from their life context. Contextualising is to be achieved during the transaction of the curriculum. Such an effort of contextualising the curriculum was found generally missing in the classroom transactions observed in the tribal Tamil medium school, VLPS. This is true of the government schools as well, though found occassionally. In the GMLPS, for example, it was found that when a lesson on the "sources of water" was being transacted, the teacher never related the matter with the heavy down pour of water which was happening outside the classroom in the form of rain.

While organising the activity based approach, every child has to undergo the experience intended. 'Learner' is the unit of learning and not the 'class' as a whole. Experiential learning to be organised in the group context of a classroom seems to pose some problems to the teachers. Some children tend to monopolise the participations more than the others, which would not ensure learning by all. Teachers need to resist the tendency of 'getting correct answers and moving ahead with the activity/session'. If not done, the activity based methodology being practiced may not be much different from the earlier textbook based approach where 'completing the lesson' was the *be all and end all* of teaching.

### **Analysis of Pupil Participation**

The methodology advocated by DPEP can be best described as activity based, experiential learning. It views pupil participation as paramount to learning unlike the earlier emphasis on teacher activity. The methodology aims at mastery learning by the children. Several competencies are identified for development among the children. The teacher is expected to plan and organise activities for children in order to help them acquire these competencies. Conceptually, the methodology considers every learner as a unit of learning rather than the classroom group. Participation of the learner during the course of a learning episode is considered important. An analysis of the degree of participation of children in a learning episode has been made. The table below provides the number of learning episodes observed during the course of the study with each category of pupil participation.

Table 22: Number of Learning Episodes\* with Different Degrees of Pupil Participation

No. Participating	VGLPS	GMLPS	KUPS	AKMMLPS	VLPS	Total
None	4	8	4	3	12	31
Only Leaders	9	12	14	14	0	49
Less than 5 children	11	14	7	6	2	40
5-10 Children	5	4	5	7	0	21
Many Children	2	2	4	5	0	13
All Children	0	0	0	0	0	0

(\* A learning episode is not a real time equivalent of a class period)

It can be seen from the table that the predominant category of participation in the classroom happens to be either of the leaders of groups formed by the teacher or of less than 5 children of the class. The following is an illustration from a classroom as observed during the field visit.

Teacher sings a song and the children repeat after every line..... The teacher asks "Did you like the song?" The kids reply that they had heard the song last year. The teacher starts asking questions based on the song.... The question is about sea (Kadal). Next the teacher asks another student, "Can you say a word that is related to the word Kadal?"..... The children started listing words..... The teacher writes these words on the black board..... Then the teacher makes all children to stand and read the words in an order in which they are written on the board. Later the teacher asks one child to come up and read. Other

children repeat. Next the teacher says that "using these words let us form sentences". Through out this phase while the teacher was engaged in this activity, there were a few children who were seated in the right hand corner who did not participate..... Later she asks the girl who had spoken 3 or 4 times earlier to read and let a weak child to repeat. (Though this was done for demonstration, through out the class so far the brighter kids and the teacher were involved in classroom interaction)..... Again that girl who earlier framed the sentence said that the boat is used to catch fish. At this point the teacher divides the class into small groups and asks them to frame better sentences in small groups. The teacher selects a few words from the board and gives different names to different groups. The children break into groups. The children are sitting in a circle. The teacher asks them to discuss and write good sentences. Aishwarya, who is the leader, is asked to help all the children who participate..... There are 6-10 children who are not attended to by the teacher. They are not included in the classroom process except to illustrate that they are unable to cope by giving them superfluous representation. A child goes and brings a chart and pens. The children are discussing in two groups . Two other groups are finding it fairly difficult to proceed...... Chitra and Aishwarya who are talkative and dominate participation in the groups since they are leaders. The teacher asks the children to frame "a good sentence"..... Later the teacher asks Chitra to provide a sentence..... There are a few kids on the right who come and sit back on the bench and start talking among themselves. They are not interested in what is happening. The participation basically is from the leaders who stand near the board..... The child Dhanya who wrote sentences, reads them one by one. The others are asked to repeat after her. Some children are not participating and they are keeping quiet. Some others are playing. This exercise was repeated by another child, who also dominates participation in the class. One child continues to play with her hair band. At lest 10-15 students did not participate in the exercise. The teacher checks orally if all the children have completed writing. The children unanimously say "Yes, we all have written" although many of them had not written. (From the observer's diary, R-1, D-1)

It may be mentioned that in most cases the children who are the leaders in a group activity are also the ones who participate when the learning episode is not a group activity. This is followed by the instances when 5 to 10 children of the class are participating. The category of no participation by the children is exaggerated because a large contribution to this category comes from one single school, which is the tribal school. In this school the teacher

most often is making a discourse, a monologue or is found reading from the textbook. There has been no instance when all the children of the class participated in an activity till its completion or till the learning occurred. Even in those cases where the teacher took extreme care to involve children, she could not do so completely because these were also the classes where the number of children in a class was large. However, an instance of participation by all children in individual work (writing) was observed in a class where team teaching was organised. This has been taken as an exception to a 'monograde teaching context' where only one teacher ought to be available at a time to any given class.

### **Nature of Participation**

The participation of children in the classroom happens in several ways in the primary schools observed. Broadly, they are classified as oral, written and doing (psychomotor). Under these categories the following types of pupil participation have been observed.

Oral Participation	Written Work	<u>Doing</u>
Repeating	Copying	Counting Physical Objects
Answering to questions	Writing Words	Classifying Physical Objects
Conversation	Composing	Arranging Physical Objects
Composing/Story telling	Problem Solving	
Reading	Drawing	
Reciting		
Singing		

The learning experiences provided in the primary classes of Palakkad are of three distinct types – individual, small group and whole class activities. By individual activity, it is meant, that every learner works by herself/himself without any interaction with another learner. The individual activities are generally organised in the form of writing work by the children and are found either at the consolidation stage of a lesson or, when a practice of the behaviour is thought necessary by the teacher. However, practice, drill and repetition do not form a part of the activity based approach where learning is more a 'construction' rather than 'a mechanical acquisition'. Working within a system in which the teacher is not continually available to the learners from the start to the end of a school day due to absence of the teacher from the class, individual work in the form of repetitive practice where the task and its

accomplishment are well defined, seems to be a convenient practice whose total removal seems to be extremely difficult as long as teaching is done as a job rather than practiced as a profession.

However, individual activity has a place in the methodology of DPEP. There were several instances when the teachers were found to organise individual activity in the classroom. The following is an illustration of individual activity in the classroom.

I went to standard IV in the afternoon..... The teacher draws nine squares on the blackboard and asks each child to write a letter in each of the square.... The teacher says "in the next ten minutes all of you have to write words using each of these letters with 'Dhirgas'. The children seek clarification if they are supposed to make a word using each of the letters as the starting letter. The teacher clarifies and the students start writing.... The students were asked to count the number of words they have written. This is a group activity in small groups. The first group has written 50 words, the third group 54 words. The fourth group leader says that they have written 127 words..... After this the children are asked to frame five questions using the words they have written...... The children have started writing..... They also have to write the answer to those questions..... All children are instructed to write five questions and their answers. (From the diary of the observer, KUPS, R2, D1).

While doing individual work, the participation of children is neither complete nor continuous. If on the one hand there are several children in the class who are not doing the work/doing some other work/engaged in talking/fighting/copying from others, on the other hand, are the instances where the children are yet to complete an activity and the teacher has proceeded to the next task.

The table 23 reveals that there were very few instances in the remote tribal school when the children were engaged in individual activity as compared to the other schools. Except in this school, the children were doing the intended work when they were engaged in the individual activity. A further examination would reveal that, on a large number of occasions, the children in the government schools were also sitting quietly without doing any work. This would mean that, if on the one hand there were children engaging themselves in the activity, on the other hand there were other children on the same occasion and all children

### **INSERT TABLE 23 HERE**

on some occasions who sat quietly without doing any work. Also, the children in the government schools were more restless during an activity and were found engaged in talking among themselves and doing some unconnected work. They were also found moving around in the class and fighting with some other child. The incidence of these behaviours was much less in the private aided schools. In other words, even though the teachers in both private and government schools employed individual activity in teaching, those in the government schools were not ensuring the participation of all children through supervision and monitoring on a greater number of occasions. The fact that, in every class observed in the tribal school, the children were found sitting quietly goes to show that the children either did not participate in the class or since the classes here were devoid of activity, they were too scared of the teachers to speak anything. Both these were true as discussed elsewhere. There were very few instances in the schools of Palakkad district when the children were found copying from the others. The high incidence of this category in on of the private schools was due to the fact that many such classes were of Malayalam and the teacher had suggested to the children that they could discuss and write. The trend discussed above was almost similar across subjects as well.

The second type of activity organised in the primary classrooms of Palakkad district is 'small group activity'. Small group activities are a definite contribution of the DPEP. This is also an aspect of methodology shift due to the DPEP intervention. DPEP encourages formation of small groups for the activities with a view to ensure "larger participation" and "saving of time". The following excerpt from the classroom illustrates what is meant by the small group activity.

T: Those who told ship, for a group. Now the second group may form which will include the persons who have told salt. Sand can form the group there and waves here. (Students start forming groups). Now form groups quickly.

(Noise is heard.)

*T: If it is the sand group sits here?* 

(Children form groups).

T: Now we will se which group can make better sentences.

(Children make noise).

T: All should think, discuss and write. I will give you ten minutes. Write soon. Let us see which group makes nice sentences. (Teacher explains about this). Don't make noise. (Students are helped by the teacher).

Group leader should see whether all are participating in the group activities. Who is the leader in this group.

T: Have all of you written?

S: No.

T: Then write fast.

(Students discuss).

*T:* See the words on the board and write sentences.

(Noise)

T: Have this group finished? Ramsya, is it over?

(Answer is not clear).

T: Say and write.

T: Now start saying the sentences.

One child starts reading the written sentences.

It was found that the schools in the district had been practicing activity based approach involving small group activity, except the remote tribal school.

**Table 24: Small Group Activities in Class** 

	VGLPS	GMLPS	SKMMLOPS	KUPS	VTLPS
Std.I	5-6	6-8	8-12	4-8	0
Std.II	5-8	6-8	8-12	6-8	0
Std.III	5-8	5-10	8-15	6-10	0
Std. IV	6-9	6-8	8-15	6-10	0

Proportion of Schools Practicing SGA: 4 out of 5

Average size of a group: 5-8

Duration of an activity: 6 to 30 minutes

It was observed that usually a group consists of 5-8 children and it has a leader who organises the activity within the small group and reports after completion of the activity to the teacher. This means that the leader has greater opportunity to all learners, participate and interact with the teacher. For providing equal opportunity, the leader should be changed from activity to activity. However, the practice is that an 'intelligent', 'confident' and 'expressive' child with fluency in speech is permanently chosen for the leadership. Even on those occasions when a leader is not required for the activity, teacher gives greater opportunity for this child by pin-pointing who should respond. Not only is that the leader is permanently chosen, some schools have gone a step ahead in structuring the group by even permanently forming the groups. Therefore many a times it has been observed that the students fall into 'their groups' the moment the teacher indicates them to do so. Such permanent groups are a restriction on learner interactions. In some cases, there seems to be an implicit thinking by the

teacher that some are more capable than the others. This gets communicated to the children as well. In heterogeneous groups, if the leader is 'the favoured child' there are instances of making homogeneous groups where an entire group is of a lower ability. This affects the democratic structure of the classroom and as a value is not in tune with the philosophy of DPEP. An instance has been provided earlier that of a class in which the leader is dominating the participation while the group as whole is generally passive.

There is a general lack of concern, while practicing the activity based teaching or otherwise, that pupil participation is necessary for pupil experiencing. Instead, the preference is one for completion of the activity.

The third category of activities is the large group activity where the entire class is treated as one group. Children in such classes are not given any individual work but are in interaction with the teacher. The teacher plays a more predominant role in such situations and explanations made by the teacher constitutes a substantial time of the period. Following is an illustration of large group activity.

T: Now we can play a game on the things we sat.

S: Yes sir.

T: I will say the names of some fruits, leaves etc. If it is eatable say "Thinnam, Thinnam" (Can be eaten).

What to say?

S: Thinnam, Thinnam

*T: If it is not eatable what to say?* 

S: Chi, Chi we have to say so.

A child comes running from the next class. Teacher asks him to go and sit there.

T: Now be careful and answer.

Leafy Vegetable – Thinnam, Thinnam.

(Gives the name of two).

T: All of you should answer. Sit in such a way that you can see me> Come here and sit.

Mango leaves

S: Thinnam, Thinnam

T: Can it be eaten.

S: No. Chi, Chi.

T: (Teacher names about 11 items of which 9 are eatable and student's responds correctly. For the other two they are a little confused and the teacher corrects them).

T: All of you take your slates and pencils and copy it from the board.

(Teacher writes on the board)

An instance of large group activity in combined class of Standard II in AKMMLPS is given below.

The teacher says let me write something on the board.

$$6 + 3 = 9 = la$$
  
 $5 + 2 = 7 = tu$   
 $7 + 4 = 11 = si$ 

The teacher asks the children to arrange the numbers in an ascending order to find out the hidden word Tulasi. The children are asked first to add them they are instructed to arrange the numbers with the corresponding letters in an ascending order which will give rise to a meaningful word. The teacher goes round and checks what the children have done. Some children are not able to write down anything from the board. The teacher goes and sits near the weak child and helps here to write. Sumitra has not written a single letter. The children to the left row except for one are not writing anything. This class has the strength of one and half sections hence the teacher is not able to give individual attention to all children.

Even in classes where the teacher has organised individual/small group activity, explanations by the teacher form a part. This is done before, after or in between the activity and may occupy 5-10 minutes at a stretch. Following is an illustration of a lesson where teacher was explaining.

- *T:* What is the total number of item that has been named?
- S: Spectacles, ring
- *T:* Who is having a ring? Now read the remaining.
- S: Tiles, Umbrella, Board, Spectacles.

(The unclear voice of students telling the names of various items are heard).

- T: What are the things needed for making sambar? To prepare sambar a lot of things are required. Similarly to prepare the things which you have told also require certain things. All of you discuss about it and write down your ideas.
- *S: Sir, shall we form groups?*
- T: Yes. Yes.

(The voice of students is heard).

- T: Take the example of a table. How it is made? Discuss it and find out. What are the materials required for building a wall? And who builds a wall?
- S: Labourers.
- T: Yes, Labourers. You think about it. Take another example as this bag? How is it made?
- *S: How is paper made?*
- T: Don't you have any idea about paper making? Paper is made with the help of certain materials we obtain from the tree. It is then grind to make paper pulp.
- S: How is paper pulp prepared?
- T: By grinding bamboos, straw etc. Now you have understood how a paper is made. Now you write how a book is made. You should write in detail.

(Noise of students).

- *T: To manufacture a table, where are the trees taken to?*
- *S: To the mill.*
- T: Then make a sheet ..... (Unclear) Now let us think about pulp. I had a lesson in third standard about the autobiography of a paper. Do you know how not books are made or how text books are made? Where are the text books taken for printing.
- *S: To the press.*

(The lesson continues)

It can be seen from the table that there is no one way in which the children respond to teacher's explanation. Teacher explanations are still present to a great extent in the primary classes especially in standard III and IV. There were also classes where a large number of children were not responding to the teacher. Following is an illustration.

After this reading exercise, the teacher frames simple questions like who asked, who is the most beautiful among the flowers? All the children answer Rajakumari. The next question - what did Chitrashalabam say? What is the peculiarity of the flower? The teacher asks a boy to answer. He is not able to answer and the teacher beats him. Only one child in the class is able to answer the questions. The other children do not participate in this question-answer session.

The category, *doing an unconnected work*, includes those instances when children are not involved in the learning experience being provided but are not sitting idle as well. From the point of view of classroom learning, they are treated as not participating in learning. Some instances when the students of a class were doing unconnected work are as follows.

It can be seen from the table that there is no one way in which the children respond to teacher's explanation. Teacher explanations are still present to a great extent in the primary classes especially in standard III and IV. There were also classes where a large number of children were not responding to the teacher. Following is an illustration.

After this reading exercise, the teacher frames simple questions like who asked, who is the most beautiful among the flowers? All the children answer Rajakumari. The next question - what did Chitrashalabam say? What is the peculiarity of the flower? The teacher asks a boy to answer. He is not able to answer and the teacher beats him. Only one child in the class is able to answer the questions. The other children do not participate in this question-answer session.

The category, doing an unconnected work, includes those instances when children are not involved in the learning experience being provided but are not sitting idle as well. From the point of view of classroom learning, they are treated as not participating in learning. Some instances when the students of a class were doing unconnected work are as follows.

The teacher now takes the next word palli – place of worship. The children again repeat the same by saying a group of words. As two children are not paying attention the children hits the children. The children are not bothered even then. 3 girls are dancing and not participating in the construction of sentences. The teacher calls out to some children and asks them to tell sentences.

Next the teacher asks the children to take 6 seeds. The children count and take 6 seeds. The teacher stands with the weaker children and observes them counting the number of seeds. The children count and place the seed on the slate. There is one child who goes on

scribbling in the slate. This child is actually scribbling on the slate of another child. But has written the number correctly on her slate.

The children are making a lot of notes. In terms of participation methods, all children get a chance, but in terms of organization there is a problem. The class seems to be too large, since it is a combined class hence there seems to be no order. There is definitely too much noise., the kids are screaming and playing, while some are doing the problems. Two girls are drawing pussy cats and ducks in their books. Some of them are fighting among themselves. The teachers are correcting the problems and explaining to the kids where they have gone wrong. The kids are supposed to write in statements. Another child is writing a problem and adding on her own account. About four kids watch her adding.

It can be seen from the table that the children in the private aided schools were listening and responding to the teacher on almost all occasions whereas the occurrence of these categories were relatively lesser in the government schools. From the fact that the children in the government schools were also engaged in several other behaviours goes to indicate that they were less attentive to the explanations of the teacher than their counter parts in the private schools. There were occasions in the private schools, however, when the children were not involved and were sitting or standing quietly. Further, it may be noted that the occasions when children were listening to the teacher were more than those when they were responding in the class rooms of the tribal school shows that the children either did not understand what was happening in the class or that they were routinely involved in those gestures which reflected listening. Both these were true since it was in this school that the children of fourth standard did not know addition, that the school had not produced even one student who had successfully completed the ten years of schooling and had passed the SSC examination, and that the children were found to reenroll themselves after standard IV in the same school.

The subject wise analysis of the behaviour of children when the teacher was explaining reveals that the general trend discussed above holds good across subjects as well.

The situation was similar across grades as well.

At any point of time more than 50% of the children are not fully attending to the teacher with a view to understanding what she is explaining. They were found talking among themselves, fighting, moving around or doing some unconnected work. This was not the case, however, in the classes in a private aided school where team teaching was employed by the teachers and in which a teacher was explaining or conversing with the entire class. In such classes, the children were not moving around or talking among themselves. However, even in these classes children were engaged in some other work such as writing something on their

## **INSERT TABLES HERE**

Table 25: What children do when the teacher is explaining – classwise

Table 26: What Children do When the Teacher is Explaining – Subjectwise

own, drawing, etc. Many students, especially belonging to the "can't learn group" were found to be sitting quietly even though they were not listening to the teacher. Surprisingly many such children are boys. The last category was found more predominantly in the tribal school where the teacher was strictly autocratic and did not at all follow the DPEP methodology for classroom teaching. The teacher in this class did not appreciate the idea of being observed by an external person and was found frequently scolding the children, probably a sign of displaced aggression. Since the students did not respond to his questions, he made the entire class to stand and the class was kept standing through out.

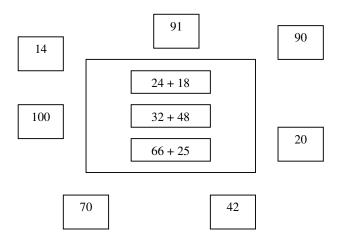
It is not sufficient that the content of the learning experience is familiar to the children or that there are activities organised in the classroom. The teacher needs to ensure that all learners benefit from the learning experiences. If the teacher believes that some students are unable to learn or benefit from the experiences provided in the classroom then her efforts would be to teach only those students who are responding. This seems to be generally prevalent in the primary classrooms irrespective of their nature. It is claimed that under the DPEP the teacher should allow students to do whatever they want. This suggestion of the trainer was wrongly interpreted by the teachers to mean that they need not attend to all children.

There were some instances, however, when a teacher employed effectively the activity based approach even in the combined classes. In such classrooms, children not only attended to what was presented to them by the teacher, they also were responding to her. Following is an illustration from a I standard class where mathematics was being taught.

This class is a combined class of three sections. Two of the teachers which include the H.M. is on leave. The teacher asked the children to write the "pattiga" the addition table. It is like this: 1+1=2, 2+1=3, 13+1=4 .... Similarly 1+2=3, 2+2=4, 3+2=5 and so on. Teacher says that this method of learning by heart addition helps the children to be first in the arithmetic operations.

The teacher goes around the classroom and corrects the written work of individual students. She complains that she cannot correct every ones work since there are three sections. In spite of that she is moving around and correcting the work of students who show her.

After 20 minutes, she draws a hexagon on the blackboard. She asks the children to observe what she is drawing.



The episode is can you break this chain (changela thagarkammo). The students are instructed to draw and solve each of the problems given in the middle. The answers to each of this problem are on the outer side of the hexagon. Only one answer is wrong. The students are asked to find out that answer.

Within 15 minutes about 20 students have finished their work. The teacher chides Shamen who has solved the problem correctly but his work is untidy. The children are crowding the teacher. As the teacher corrects she also locates the mistakes that the children have committed and instructs them to go and solve it again. The teacher scolds one child for trying to look into his neighbour's book and copy the problem. She asks him to solve it on his own. By this time, more than 30-40 children have solved problem.

The children seated at the back benches and towards the outer square of the classroom are not doing the problems. They are sitting quietly. This teacher is unable to pay attention to all the children because this is a combined class. Although, occasionally she moves towards the weaker children, she is unable to give them the full attention that they require.

### **Team Teaching**

Team teaching is another approach, which was advocated after the starting of DPEP in Palakkad. This is done in large classes where the number of children and sections are more. The senior most teacher undertakes the responsibility of leading the teaching. In the observed schools, the teacher followed a more conventional style of teaching with long explanations and repetitive work, three teachers were simultaneously present in the hall where three sections of standard IV were combined for learning mathematics. It was reported by the teachers that for teaching the sections are combined and the senior teacher was supported by others during individual work. The role of the team does not appear to be

very clear except for supervision and guidance when all the three teachers are helping the students to complete the activity or solve problems. If at all the need for team teaching was felt by the teachers and the BRC trainers it was in teaching of mathematics, where a single teacher was unable to provide individual guidance and feedback.

### Combination of conventional and activity based approach.

There seems to be a transition in the district with respect to the methodology of teaching at the primary stage from the conventional teacher centred verbal approach to learner centred activity based approach. This transition, however, is not complete. If in schools where the activity based approach is implemented earnestly by the teachers, they are also found to use the conventional style followed in a teacher dominated classroom. This is partially because their perception of primary education has not changed much. The teachers and the parents think alike that the primary education must enable the learners to be able to read and write. This they consider as "serious teaching" as stated by one of the teachers. If it is generally considered that the DPEP approach brings in a lighter teaching as felt by the Headmistress of a school and some parents. It is difficult to give up the so called serious teaching which is full of rote learning and repetitive work to be done by the students. In several classrooms the teachers seem to have compromised by combining the conventional and the activity based approaches. In a first standard classroom, for example, at various stages of activity on addition and number concept the teacher was found to make the students repeat the answer five times in the form of oral drill.

"One child who understood the instruction said that we need only one seed since we already have 10 seeds with us. 10 + 1 = 11. This, the child has done, on his own and now tries to explain to the other children. The teacher repeats the addition with 10 broom sticks and one tamarind seed as equal to 11. The kids are made to repeat 10+1=11. Repeat about five times.

The teacher does not attempt to find out the difficulty of the other children who have not followed the instruction. Instead, she makes one of the two children speak loudly 10+2=12 and this is repeated by all of the children about eight times.

Again the teacher says she is going to give more oral problems. She says, "I saw two scooters" and then asks the children to show two with the help of sticks. Children show two sticks. She says "As I was moving out I saw two buses". The teacher again asks to show two.

After this, she asks them to add and tell how many vehicles she saw. The children add and say it is four. The teacher repeats and says 2+2=4. This is repeated six times.

The teacher calls Vinay and says that "Vinay had 3 mangos with him yesterday". Vinay comes forward and places 3 sticks on the table. Next the teacher calls out Anil and says, "he too had 3 mangos with him". Anil comes and places 3 sticks as well. Now the teacher asks how many mangoes are there together? She calls out Raj to come and add. Raj adds and says there are 6. The teacher says 3+3=6. This is repeated by children 8 times (from the field notes of the observer, KUPS, R-1, D-1).

In some other class, the teacher asked the students to recite the tables in chorus. Such a mechanical exercise could only ensure a terminal response. In another class where the teacher was teaching Malayalam, the teacher wrote alphabets on the board and conducted a oral drill exercise in which the children repeated several times an alphabet following a student leader. This could be because of a belief among teachers that learning (terminal response) needs to be consolidated (learnt by heart) for retrieval and subsequent use.

### **Organising Activity Based Teaching**

It was observed during the course of this study that even though activities are used extensively by the teachers, activities were not an integral part of every class. There were instances when the class did not have even one activity. Further, there were inter-school variations in the number of activities organised at a particular standard. The table provides a picture of the use of activities in the schools observed.

Some instances of classes in which the teacher used activity are mentioned below.

In the afternoon I went to Standard 1 (Anitha's class) The teacher has divided the children in two groups. The teacher writes numbers on each child's slate and the children look into the slate and recognize the numbers. The children are asked to sit in groups based on the numbers written on the slate.

### An activity in standard I:

The teacher has divided the class into 4 groups. The children recognize the number written on the slate and sit in groups. The teacher asks them to sit in a circle. She says I want to give all of you something. The children sit in a circle and wait for the teacher's instruction. The teacher places a lot of seeds in the middle. She says I will call out a number. All of you must go to the centre and pick up those number of seeds and write the number in your slate. She instructs them that they must do it slowly and not push each other.

# INSERT TABLE HERE

**Table 27: Use of Activity in Classroom** 

Some activities organised in the classroom are in the form of games. An illustration is given below.

T: We can read afterwards. Please take your seat. Can you guess what is our next programme?

You are divided into two groups. Keep your `slate' in floor. Who is throwing slate?

Next, don't make too much noise. Two groups. One is boys, another one is girls. One group will ask questions in the form of riddles and other group must tell the answer. When one group is answering another group must keep silence.

T: Who is first to start?

(The game begins).

Games are another kind of learning experiences provided in the classrooms. It was reported by both teachers and trainers that children like games and hence the methodology advocated in the DPEP emphasises the use of games in learning. Usually these games are in the form of "Guess Games". Guess games were being used by the teachers in the teaching of all subjects. Many of these games were planned by the trainers and they discussed the implementation of the game in the monthly meetings with the teachers. They were, some times, also planned at the school level. Following is an instance when the teacher uses the guess game in the class.

(The teacher just completes taking attendance)

- S: Teacher
- *T*: *Oh.....*
- S: Teacher, Teacher... Is that aunt comes for teaching?
- T: Aunti has come for looking whether you are good students.
- *S:* What is your name teacher?
- T: Anitha
- S: Anita.... Anitha
- T: Prasad go (not clear) take
- T: (not clear) We have read newspaper? I have said to collect some idioms from home. You got it" Any one"
- S: No, teacher
- *T:* You have not thought?
- S: No
- T: Aa... that you have forgotten on the midst of Onam?
- S: Aa..... become under the Onam
- T: No problem, you search it today
- S: Not today, on next Monday

- *T: Oh.... Lot of idioms*
- S: Teacher, Teacher
- *T:* Then keep in memory number of some vegetables and fruits.
- S: For what
- T: As puzzle. If you want to write in a slate
- T: I am now telling a puzzle.

I am a fruit, O.K. It is yellow in colour. By removing its outside, we will eat the inside. Which fruit it is?

- S: Banana, Banana
- T: Like this each of you ask
- *S:* Whether we have to sit in round?
- S: Aaa... Ya... No
- T: Then sit here
- S: Only 4 required, 4
- *T:* Which lesson you are going to say?
- S: Kingini only Kingini
- *T: Malayalam note book*
- S: Is it Kingni?
- T: Taken?
- S: Who
- T: Ramya
- T: Find puzzle, Five. Find this, Vegetables, fruits, flowers. If you want write in your book
- S: Teacher, make curry
- T: Say
- T: Find all, Aaa, say that you have found out
- S: It has root, black colour, bite when touch, form curry
- T: Don't say answer. You can understand what it is
- *S:* What teacher?
- *T:* You write as he has written the properties
- T: You are one group. Sit there and think. 5 vegetable, 5 fruits and flowers. You should find within the time of 10 minutes. Think and write.

  (Transcript of a Lesson observed in Standard I)

Activity is an integral part of every lesson in the primary classes of Palakkad district. As said earlier, the tribal school is a total exception to this rule since none of the classes there wee with activity. Occassionally, due to combining of classes and teacher absenteeism, the classes in government schools were without activity., The teacher absenteeism, however, did not influence the organistion of activities in the private aided schools. Organising activity in the combined classes, when the teacher of the other section was absent faced a special challenge to the teachers. If the teachers in the private schools were found to put extra efforts to make even such classes truly activity based, those in the government urban school did not try enough to cope with situation,. The activities in such classes were truly haphazard. A major reason for the failure in implementing activity based teaching in the government schools comes from the fact that the teachers had not yet started believing in the philosophy of it,. Nor were they found to have the commitment to the cause of educating children as much as those in the private schools. The activities organised in the afternoon in the government schools, for example, were more of a routine attempt to keep the children engaged.

It was found that, on an average 2 to 3 activities were organised in a class period. The number of activities in a class period were maximum in standard I and there were instances when as many as five activities were organised in one class period in three schools. If the activities were of a shorter duration and were more in member in standards I and II, they were less in number and of longer duration in standards III and IV.

The activities planned by the teachers are for small group work. 5-8 children form a group. Organising activities seems to be done sincerely but without the ingenuity shown by a teacher to understand its philosophy. In one of the classes of mathematics in the rural upper primary school, for example, the teacher organised a role play in which groups of children where to act as shop keepers and customers. Using tokens and coins as money they were to undertake selling and purchasing of items such as school bag, slate, pen, pencil and umbrella, which involved their knowledge of money, addition and subtraction. While doing this activity except for the children who were playing the role all the remaining were waiting for their turn. Gradually the students who were not acting or those who had already enacted lost their interest, which was very high at the beginning of the lesson. An ingenious teacher who understands the philosophy of grouping would have probably thought of simultaneous role play by all children rather than by one group at a time. Further, the role play did not envisage that the children acting as shop keepers also needed to learn addition and subtraction because the children who were purchasing were only required to write and not those who were acting

as shop keepers who simply were standing. Another reason for not organising simultaneous role play was that sufficient material was not available at that time to give to all the groups. While practicing activity based teaching it is generally found that the teachers are not very keen on preparing instructional material and have even expressed that instead of giving Rs.500/- (which is a teacher's grant in DPEP), the BRC must provide them with instructional material. One teacher said that she had used the amount to purchase a hanger for hanging maps.

There were instances when a teacher went from one competency to the other in the same class period such as from number concept to odd and even numbers to oral addition. Unless these were revision exercises it is extremely difficult to imagine that the students would proceed from one level of the ability to the other within the short time of a class period. In fact, instructional time is a variable in the learning paradigm which underlines the competency based teaching. On the other hand, there were instances when the teacher used the song or activity used for one class group of children to another lower or higher class group as well. It is needless to say that the same learning experience, without any change what so ever, would be appropriate for another group of learners. Further, it was also observed during the course of this study that the teachers did not spend sufficient time on planning or they did not consider that it is essential. As a result, such teachers repeated an activity which they had planned for an earlier class. The following is an illustrative instance.

I went to standard II at 11.15 hrs. The teacher starts the class with a song. The teacher walks up and down in front of the class and sings the song line by line. The children repeat it after the teacher. After the song, the teacher asks all the children to take the textbook. The topic for the day is "Among the flowers which is beautiful?" The teacher writes the heading of the lesson on the black board. One child "Vipin" says that this lesson is already taken. The teacher brushes aside it and says it was a different lesson. The child insists that the lesson was taken previously. The teacher is annoyed, ignores the boy and starts the lesson. The teacher reads the lesson aloud, the children follow the lesson in the textbook. The teacher then says "next page" and checks around if all the children have turned the page. The teacher continues to read. The teacher says "Vipin, did you understand" What is the story? The teacher asks. The child tries to say the story. He is unable to say it completely. Now the teacher makes all the children to stand and he reads the

lesson line by line. The children have to repeat after every line..... Then the teacher asks Vipin to read. The child reads the lesson. It seems that the child had by

hearted the lesson and is actually not reading. The child made a lot of mistakes while reading. Though the child was unable to read correctly other children were asked to repeat. After this reading exercise the teacher frames simple questions such as "Who is the most beautiful among the flowers? The children answer. They then sing the song.....(from the Observer's diary, R-1, D-2).

Even the levels of experience provided change from one to the other in a given class period itself. In one class the teacher proceeded from the concrete level of working with sticks and seeds to semi abstract level of working with a number to the abstract level of oral addition in one class period itself. Interestingly the teacher reverted back to the concrete level when she found that the students were not able to respond to her questions by suggesting to add the number of sticks given to them earlier.

There are also instances when a teacher used an inappropriate experience to the grade to which she was teaching. For example, in a first standard class the teacher wrote a poem on Jasmine flower on the black board and made the children repeat with her. When she asked the children to identify words usually found, many children were unable to read the words, leave alone the sentences. Thus, writing the poem on the blackboard hardly serves any purpose if the students had to memorize the poem. In another mathematics class of standard IV the teacher asked children to pick cards on which numbers were written. The cards picked by four children were containing the numbers 679, 268, 1629 and 403. They were asked to multiply these numbers by single digits 6, 5 and 7. It can be seen that the multiplication involved do not fall at the same level of difficulty. It should have been ensured that the children carry out activity at the lower level of difficulty first before they were taken to the next level of difficulty. This, it is needless to say, will not happen within one class period.

There are also instances when the speed with which the teacher shifts from one activity to the other is not in accordance with the learning capacity of the children. This is particularly true of teaching of mathematics and is also found in the teaching of Malayalam and EVS. In such classes the teacher seems to be in a hurry to complete the activities planned without much of an attention being given to learning. Experiential learning, hence, has remained in philosophy than it is seen in practice.

### **Supervision of Pupil Activity**

In a classroom, the learners undergo sequential learning experiences provided to them. In order to benefit from the experiences provided a learner needs feedback. The teacher's, role when the students are engaged in activities whether individual or group, is to supervise and guide the learners. There seems to be several ways in which teachers in Palakkad undertake supervision in their classes. The types of supervision practiced by the teachers and their frequency is given below.

Table 28: Types of supervision by teachers

Teacher goes round the class and provides individual help - Rarely

Teacher selects leader to provide help – *peer supervision* - Some times

Teacher moves around without providing individual help - Often

Teacher remains in one place expecting children - Most often

to bring their work

Two most common ways of supervision and providing feedback followed in the primary classrooms of Palakkad seems to be moving around the class and sitting or standing in one place expecting the children to bring their work. Both these approaches have their limitations. In classes where the teacher is moving around, she is found to be doing it more mechanically and does not provide the time that is required for supervision and individual feedback. When the teacher is at one place and the students have to bring their work, all students are not found to show their work after completion to the teacher. In both these some children who are not learning but are in need of guidance get neglected. Those who can would learn and those who cannot would continue to lag behind in such classes.

### Reinforcement

Knowledge of results of performance is essential for learning to occur. Children do look forward to receive feedback and reinforcement in the course of their learning. Supervision by the teacher provides instances for reinforcing student learning. It is observed that teachers usually resort to ticking the written work of the students. In some instances this was done so mechanically that even wrong answers of students were routinely ticked as correct. Also, verbal reinforcement such as *correct*, *good* are used by the teacher. There seems to be a general tendency to suggest to the other students to emulate the work done by a

student who has completed an assigned activity to motivate them. Competency based learning however should be devoid of a normative reference to another learner. The need to make the competency criterion as the reference for learning is yet to be practiced in the classrooms.

There were a few instances when teachers used token reinforces such as chocolates and chalk pieces. They declared to the students that the one who completes the task or the one who complete the task first would be given these reinforcers. However there was a general negligence of students who were not task oriented and were in need of a suitable reinforcement.

### Remediation

Competency based teaching for mastery learning does not presume that all children are at the same ability level. The activities designed by the teachers or the supervision done by them do not seem to take into account this in principle because the activities are packaged programmes administered to children irrespective of their ability or interest. In such classrooms the two extreme groups of children namely those who have mastered a competency ahead of others and those who require more time and activity to learn tend to suffer.

DPEP in Palakkad has not been geared to mastery learning paradigm as evident from its nonrecognition of the need for individualised feed back and provision of remedial help. Activity based teaching is more activity centred rather than learner centred in its organization. However, the trainers as well as teachers recognise the fact that all children cannot learn from all experiences. If the trainers and their training strategy have yet to find a workable approach to organise remedial learning experiences, the teachers are least likely to even realise the need for remediation since a majority of them have opined that *all children can't learn*, meaning thereby that there is no effort needed to make such children learn. This is to do with the attitude prevalent among the teachers than the implementation of a srtrategy. The training seems to have made very little impact on attitudes such as this which reflects itself in the organization of the activity based and experiential learning programme in classroom.

Almost every teacher observed in the study seem to know which students in his/her class are weak or slow in their learning. This usually is the group which lacks a learning environment at home and belongs to a lower socio-economic group in the community. When teacher encounters situations reflecting the inability of a learner to benefit from a given

learning experience, she either turns a blind eye and proceeds further with what she has planned or advises such children to put in more effort, try again, practice at home etc.

#### **Teaching Learning Material Used**

Instructional materials form an integral part of the activity based teaching. Material which are locally available are procured by the teachers. A teacher had brought tamarind seeds while teaching counting and another had brought a nest of a sparrow for teaching places of dwelling. Following is a situation of teaching where the teacher uses objects as teaching learning material.

T: I am placing some sticks here. Count and take ten each.

S: 1, 2, 3, ...... 10.

(Every one counts again and again).

T: Every one got ten?

S: I have.

T: Now I am going to put some tamarind seeds. Count and take.

Teachers also use specimen as teaching learning material in the classroom. The following are instances where the teacher used specimen in classroom.

....The teacher again asks the children to clap together and sing the song of the elephant. The song says, 'wild elephants live in forest, tame elephants live in the city and the elephant that lives in a hole is a hole elephant.' If translated into Malayalam, 'hole elephant' refers to an insect that lives in holes made of sand. The teacher asks the children if they have seen the hole elephant-"Kuzhiaana". The children say yes. The teacher asks the children to go out and bring a hole elephant. All children rush out of the class.... One child says that he has not brought it because it will bite. Another child says it will bite but still is holding on to one in his hand. The teacher asks them if they have seen it move. Children say yes. (the class continues)... (from the observation made at the VGLPS, Round 1, Day 1)

"After the break, I went to standard I. This teacher has papaya, onion, tomato, banana, and bitter guard on the table. In this class, the teacher has planned to test the ability of the children to differentiate. The teacher shows a bitter guard and a banana to the children. She asks a child to tell five characteristics of each of them. The child stands up...." (VGLPS,R1D1)

Instructional materials are also prepared by the teachers in the form of cards and charts. They are used in the teaching of letters, words, etc. in teaching of Malayalam and in teaching the number concept, addition, subtraction, multiplication and division in mathematics and classification and comparison in EVS. Whereas the teachers use this instructional material suitably in the class, they seem to be governed more by the suggestions of trainers and the way an activity is described in the teachers handbook than the adaptations required to suit their own classroom situations . It is also found that instructional materials are generally understood as those which are handled by children. They are of low cost and can be made easily by the teacher. However, there seems to be a reluctance to prepare teaching aids and the teachers expect that the BRCs will provide them with teaching materials. In one class which was being recorded and the activity being done was of story telling, children took a keen interest in telling stories because it was being recorded. The school also has a tape recorder which could be used for providing learning experiences to the children but was not considered by the teacher as a teaching aid. There seems to be a need to expand the meaning given to the instructional material and teaching aids if a variety of learning experiences are to be provided to the children. The table below provides an idea of the use of instructional material in the classrooms of Palakkad district.

By information from children/activity is meant as those instances when the experiences of one or more children is shared with the others and when such shared experiences are considered necessary for learning. The following instance is given in illustration of the same.

"The lesson is titled as "Manthrika Komali", which means a magician clown...The teacher asks what did the elephant do? The children say that the elephant rode the cycle. The teacher writes the sentence on the board. What else did we se in the circus?, the teacher asks. One girl said that she saw a parrot. The teacher asks what did the parrot do? The child was not able to answer. The teacher moves to another child and asks what else did we see? This child said we saw a frog. The teacher says that we do not see frogs in a circus. The next child could not answer. One child said he saw a monkey. The teacher asked what did the monkey do? The girl said that the monkey was playing in the ring. The teacher writes these sentences on the board another child could not answer. The next child said that he saw a bear that rode a bicycle in the circus. Another child said that a tiger walked along the way. One more said that a lion jumped through a loop. The teacher writes on the board..." the lesson continues. (from the observation made at the VGLPS, R!D2)

# **INSERT TABLE HERE**

**Table 29: Use of Teaching Learning Material** 

Since the primary schools in the district use activities in teaching the children and since much of the activities are organised in small groups, the information from children and from activities constitute the main input of material in teaching and learning. This is only second to the use of black board. If teachers in the private schools used the black board on almost all occasions of teaching, those in the government schools did not use it in some classes.

The teacher talk was the next used material in teaching learning. Its use was maximum in the urban government school land was minimum in the urban aided school. Teacher talk was the most used material in the tribal school, followed by the use of black board and the text book in that order. This only shows the conventional nature of the teaching learning process in this school where the teacher plays a dominant role.

In a large number of classes in the private aided schools, the teacher used visual aids such as charts or cards and also they used objects and specimen. The most used objects in the classes were 'seeds' and 'broom sticks'.

Just as in the case of tribal school, the teachers in the government rural school also relied heavily on the textbook. On the contrary, there were no instances of the use of text book in the urban government school and the only instance when a book was used in the class was when a teacher used a story book.

#### **Textbooks**

To most of the children in the primary schools of Kerala the textbooks are provided by the state. The children belonging to disadvantaged groups such as Scheduled Castes, Scheduled Tribes and the Backward Classes are provided the textbooks free of cost. In another scheme, all girl children also get the textbooks free. This means that the boys belonging to the forward community are the only category of children who do not receive the textbooks from the state. Kerala has a system of distribution of the textbooks through the society. It was found during the course of the study that on no occasion did all children have textbooks with them. Mostly one or two copies were available for the entire class and there were instances when the teacher also did not have the textbook. It is not clear whether textbooks, if at all prepared by the state, serve any purpose in classroom teaching if it is not available.

The use of a textbook in the changed context of teaching seems to be not very clear to the teachers. The tendency of using the textbook for mechanical and rote learning of its content still persists in the classrooms. This is extensively found in those classrooms where the teacher is not competent in using the activity based approach or is not convinced about the desirability of using the approach. A teacher in the tribal school, for example, used the textbook extensively despite the fact that none of the children had a textbook with them on the day of the observation. The following is an excerpt of the observation made in this class.

The teacher repeatedly read the lesson for more than 6 times. The teacher asks the children to move their fingers along the lines. He reads the lesson..... Then the teacher asks a question. Children do not answer. Teacher provides the answer. Children have to repeat the answer 3 times..... Teacher repeatedly asks the same question, speaks out the answer and makes the children to repeat the answers. (from the diary of the Observer, VLPS, R-1, D-1).

Reading from the textbook, making students read from the textbook and asking questions based on the textual content was still prevalent as a reminiscence of the pre-DPEP classrooms.

Almost all teachers were concerned that the textbooks are not supplied properly. Schooling and use of textbook are so strongly associated that some children and the parents who were interviewed during this study were also expressing their displeasure about the non-availability of textbooks.

It was found during the course of this study that the teachers had encouraged children to develop story book and song book in some schools. This was a suggestion made to the teachers during their training. There were instances, though rare, when the children brought these books to the school and the teacher used them as instructional aid. Below given is one such instance.

Then the teacher says -I will divide you all into groups and give you the song book. Each of you can pick a song of your choice and act out the song. The subject is Malayalam. The teacher gives the song book to each group and the group has to select a song.

### Joyfulness in Learning

A primary aim of the revised curriculum and the methodology of primary education under the DPEP is to make learning joyful. Learning through the earlier methodology was considered a drudgery and was full of uninteresting classroom work with its emphasis on rote learning. Children were hardly allowed to play and sing in the classroom unless it were a part of the textbook.

Under the DPEP, a child is to be provided with such content and approach that he/she is happy while undergoing leaning. Songs, activity, stories and games form essential

experiences provided in the classroom. However any activity, by itself cannot ensure that learning through it is joyful. The manner of its organisation in the classroom plays an important role. Appropriateness of learning experiences is also influenced by the attitude of the teacher who organises it. There were instances when one or more child in a class was not enjoying what was provided in the form of learning experience. The following is an instance which illustrates this.

I reached standard II again at 2.45 p.m. The children are completing writing of a few words written on the black board. The teacher instructed the children to copy the words on their slate. The children completed writing. While checking the written work the teacher instructed the children to keep their books aside..... The teacher asks why the Princess wanted the flowers? She asks where did the Princess see the flowers. The children answer. On seeing the flower what did the Rajakumari say?, asks the teacher. The children are not concentrating. Hence the teacher makes the children stand and sit a few times. The teacher calls out Vipin and asks him the meaning of the word Sugandham (Fragrance). Vipin answers that it means good smell..... The teacher asks the children to demonstrate how to walk slowly..... Vipin is asked to walk slowly. The teacher seems to have specially focused on Vipin through out the class by directing questions at him..... the teacher asks Vipin to tell the story. The child looks really frightened. After some hesitation he told the teacher that he knows only a small part of the story. The teacher asks another child to tell the story. The children are unable to narrate the story. The teacher enquires why they are not able to tell the story.

(from the Observer's diary, R-1, D-2).

Songs and singing by the children in the primary classrooms have become a common sight. Generally, children are actively participating in singing and are also found to be enjoying it. Topics such as school, home, animals form their content. Elephant is a favourite topic of songs. One also finds number songs involving counting, addition and subtraction. Most songs, it seems, are written by the teachers themselves.

Songs are used in the primary schools of Palakkad for different purposes and at different times during a class period.

At the beginning of the class, the teacher usually invites children to sing by saying "come let us sing and have fun". There are also occasions when the children express their desire to sing. It is seen in some Malayalam and Maths classes that the children's singing is a planned learning experience to prepare a context for learning or to develop a certain

competence. Singing at the beginning of a lesson/class period was found in those schools where the teachers used songs extensively. Following is an instance when a class begins with singing.

```
(Teacher takes attendance)
T: How many months are there in a year?
S: Students answers are different – 3, 6, 12 .....
T: Which are they? January,
S: February, March.
T: March?
S: April, May, June, July, August, October?
T: What? September
S: September, October, November, December.
T: Now, how many?
S: Twelve.
T: We can sing a song about, how many months are there in a year.
(Following this Teacher sings a song about months. Children repeat).
T: January; came, Window opened.
S: "
T: New year is coming.
S: "
T: It will come soon.
S: "
T: Silk covered February
Teacher sings the entire song. Each line is repeated by the students.
```

Songs, if meaningfully used, could provide the learning experiences needed for the development of the expected competence among children. Here is an illustration when song is used for providing the learning experiences in developing the reading ability.

The teacher says that for each group, I will give you a book. She distributes the book to every group and tells the students to keep the book in the middle. So that the teacher says look into the book and choose a nice song so that you can sing. One child asked the teacher if they have to copy the song. The teacher says 'no', you need not copy, you only choose and sing a good song. The children practice the song. The teacher moves around to help the groups. The children argue among themselves in choosing the song. Some grumble that the tune is low. The teacher gives about 10-15 minutes to do this activity. The children after choosing the song also are looking at the other songs. Some groups have practicing the song. In one group, there is a disagreement about the choice of song. The teacher says all of you have to choose a song that is really nice. She also gives the option of choosing more than one song and to practice both and later decide which is really nice. The children turn the pages over to choose the song. Some of them attempt to read and give a tune to the song. After 15 minutes, the teacher asks if the groups are ready. The children discuss that they want to sing well and they need practice. The teacher encourages more participation in the groups and asks most of them to join the song. She checks if groups four is ready and then asks the first group come and sing. The teacher instructs two children who come in the middle to sing

## **INSERT TABLE HERE**

**Table 30: Use of Songs in Classroom** 

while the other members will have to repeat. The other groups listen. This song is about a Hen. The song goes like the goat said mama and the hen said cho cho.

Songs are also used by the teachers for seeking the attention of children, for disciplining and for keeping children occupied. They are more tactical. Following is an illustration of the use of song after an activity.

```
T: How many got the answer?
(Noise)
S: Aaa, got.
T: Good The answer is 3893?
S: Aaa, got.
T: Take the books. Who has done these 4 problems. Others write this. Who did not
understand this. Should know from other pupils. Understand?
(Noise)
T: Have you written completely?
S: Aaa, completed (All)
T: Sing a song? With all.
S: Aaa, Sing.
T: Aaathale, Eethale, kungathoole
S: "
T: Ynganoru natakam kanam pooyi.
T: Thappu kottanam, Dappam patanam, Kettu?
S: Aaa (with all)
T: Aaathale Eeethale, Kungathole.
(After the song teacher starts with an activity).
```

An extreme situation of utilising the instructional time for singing was observed in the GMLPS where a total period was spent on singing. Further, there seems to be a strong association at least in some teachers between the children singing or being engaged in an activity and the expectation of the BRC personnel from the teacher. The following is an instance that illustrates this view.

The teacher has instructed children to undertake a written work ..... children who have not completed are asked to sit on the floor and complete the writing..... children are restless as the lunch break is approaching ..... one child asks the teacher to pronounce one of the words written on the board "Murgaele" (drum stick leaf). The teacher reads it for the child..... The BRC jeep arrives to the school. The teacher immediately gets the children engaged in singing. Two kids on their own go up to the board and are engaged in addition of numbers 9 and 3, 8 and 2, 7 and 3. (from the field notes, KUPS, Round –1 Day-1)

Despite the efforts of training the teachers to understand and follow the approaches and activities which are joyful to the learners, so long as the teachers do not feel the necessity

for this change or understand the place of singing in learning, apparently joyful activities may be organised so mechanically that they do not really contribute to the joyfulness of the learners. It is generally found that children in the schools observed enjoy singing and songs, except in the tribal school where singing was almost absent. But, there are many teachers who either do not appreciate its role or are not fully competent in organising them. This is also because of the belief in the teachers that school learning is a serious affair and cannot be predominantly done through lighter activities like singing. Here is an instance of a class without a song, and not even a game or an activity.

The teacher writes the title of the lesson "Sutrapuravil" on the board which means our surroundings. He starts the lesson with a series of questions.

- T: What is around us?
- S: Plants
- S: Grass
- T: These are small things. Tell other big things around us?

Children do not answer. Teacher is slightly annoyed and repeats the question. The children do not answer.

T: Stand up all of you

All children stand

- T: What are the things around us?
- S: Streams
- *T: Shat else is there around us?*
- *S*: (slightly hesitantly) mud and stone.
- S: (in a low voice) there are rose trees (Teacher seems happy. He was probably looking for the work 'tree'
- T: Correct. Now tell me what other trees are there around us?
- S: Mango tree
- S: Jackfruit tree
- T: There are rocks around us. Don't you agree?

Many students: Yes T: Is a stone a rock?

Many students: No. It is not a rock

- S: It is a different thing
- T: What about mud?
- S: Mud is also different
- T: What is another name for plants?

(No answer)

- T: (Annoyed) It is called "Tavarangal" (Teacher writes the word on the blackboard)
- T: (repeats) It is tavarangal i.e. Vegetation that includes plants and trees.
- T: There are three types of vegetation. One is smaller plants (writes on the Black board). Give

me examples of smaller plants.

- S: Tomato
- S: Bringal
- S: Ladies Finger

- T: There are some plants which are slightly bigger. They are called "Keetrachedigal". Give me examples of such plants.
- S: Purva
- S: Guava
- T: No, they are all trees
- S: Green gram plant
- T: Yes (writes on the black board). The next kind of vegetation is trees. There are a lot of trees

(children give examples and the teacher writes on board)

- T: Dai Inge Parada. So you have to tell me the three types of vegetation? (Students repeat without even looking at the board)
- T: Give me examples of small plants.

(The child whom he points does not answer).

- T: (In a scolding tone) Why can't you say ragi
- S: Paddy
- T: No we can't say paddy. It is little big
- T: (doubtfully) O.K. we can say paddy also. Also Green Chilly.
- T: (Pointing to a child) Now think of some examples of little big plants.
- T: (Suddenly) why are you making noise? All of you stand up. 'Paradai'
- S: Malaigiri

(Teacher is not able to connect. He asks others which plant was he referring to?)

- S: It is growing around the school
- T: (not sure) Go and get a leaf. (A child runs)
- T: Parathi is another example.

(Teacher sends another boy to call the earlier child. Teacher waits for them. The boys return and

show the leaf. Teacher makes children say the word malaigiri).

- T: What else do you know (repeats twice). Children to not answer.
- T: Solangadhai (Tell)
- T: O.K. If you do not know about small plants, at least give me examples of trees.
- S: Teak tree
- S: Rosewood tree
- S: Tamarind tree
- *T: Then...*
- S: Guava tree
- S: Cotton tree
- S: Coconut tree

(Teacher goes back to the board and reads what is written on the board)

- S: Mango tree (Mango)
- T: (Corrects) It is not manga. It is Mambalam
- S: Malli Plant (Coriander)
- S: Banana Plant

(Teacher reads all examples written on the board)

- *T:* Is there no other example that you know?
- S: Elicaly
- S: Marasa

(Teacher is unable to follow. He ignores)

T: Are you all feeling sleepy? Stand all of you (he shouts). Keep standing till I tell you to sit down.

(Teacher reads the names of small plants, big plants and trees. Students repeat after the teacher).

- T: Krishna, look here and repeat after me.
- T: Krishna, look here and repeat after me.
- T: Into how many types are vegetation classified?
- *S: Three types*
- T: See the board and tell. How many types of vegetations are there?

Many voices: Three types.

- T: Are you feeling sleepy? Let us sing a song.
- T: I will go and bring a big stick (he goes out of the class and returns with a stick)
- T: All of you look here and read (Teacher reads and children repeat)
- T: Tavarangal

All: Tavarangal

- T: Let us move to types (Teacher reach all children repeat).
- T: Seruchedigal
- All: Seruchedigal
- T: Parthenium

All: Parthenium

- T: All of you say Parron Plant
- All: Parron plant

(Children are standing and repeating)

- T: Marangal
- All: Marangal
- T: Eucalyptus
- All: Eucalyptus
- T: Have you seen Eucalyptus

(Children show the direction where the eucalyptus trees are grown and say yes. The reading and

repetition continues. A child sits as her legs are paining. Teacher does not notice.

T: All of you look here while I read and you repeat (Exercise continues as children are standing.

Teacher now makes one child to read and the others repeat. The child could not read. Another

child is asked to come forward. She splits the words and makes an attempt to read. Another

child Murugan is asked to come forward).

Murugan: Ragi

All: Ragi

T: Do you know what is Ragi

All: Yes.

(After all words are read teacher asks children to take out their note book and write. Children obey).

T: Do not write the heading. Just write vegetation, big plants, small plants.

(Teacher helps some children to draw columns. Children kneel on the bench for writing. Teacher looks at the watch. He moves around. Children instead of writing are almost tracing

the letters).

T: You must tell and write

(Children write on their own. Teacher moves around supervising. He goes and sits with the

children. He asks children to read silently till others complete. The bell rang. Teacher leaves

the classroom).

It can be seen from the table above that, a clear difference in the use of songs existed between the government and the private schools of the district. The government school teachers made provision for singing in less than 20 percent of their classes where as the private aided school teachers used songs in more than 80 percent of their classes. An instance of extremely poor use of songs was found in the tribal school, where the teachers did not use songs in almost all of their classes. There were more instances when the government school teachers began their classes with a song than they ended it. Whereas, the private school teachers began as well as ended with songs on almost equal occasions. The government school teachers used singing only once in a class period whereas, the private school teachers used it on more than one occasion in a period. The teachers of private aided school located in the urban area used songs at the end of an activity. Not only that the government school teachers used song on much lesser occasions in a class period, the number of songs they used in a class were also less. In the private school, on the other hand, there were classes observed when the teacher used as many as seven songs in a class period. Much of the teachers in the private schools had written the songs and composed them all by themselves.

### **Ending of a Class Period**

Just as the starting of a learning episode is important, the ending of a learning episode is also important. At the end of a learning episode a teacher normally attempts to establish the learning by recapitulating/reviewing what has been learnt. At times, the teacher may assign some work for children for consolidation or as follow-up. The table below summarises the ways in which the learning episodes ended in the schools observed.

As can be seen from the table, there were five different ways in which the learning episodes ended in the schools. Illustrations given below explicate what is meant by a given category. Here are instances which show abrupt ending of a learning episode.

One child has written 6 in wrong manner. The teacher corrects this child and write 6 and draws column. The teacher makes this child write 6 one below the other. All children on their own go on writing 6 continuously on the slate. The teacher after sometime said that I will ask one of you to write 6 on the board. The bell rang.

One child checks if in 1000 six digits have to come. The teacher says no there are only four digits. The teacher later gives them a sum for the homework. The children are asked to complete the problem. She asks children who have not written to write down the problem,. The teacher stops teaching at 12.45 and leaves the classroom. The bell rings and it is lunch break.

She calls and asks him to write all the 17 words. Only if you have finished writing you can go and play. Two children are just not interested to learn. At this time, there is a huge van with procession going on the main road. The children look out of the window and the teacher also joins them. The bell rings.

Abrupt ending of a lesson happened in more than one way. A learning episode, for example, was found to end along with question-answers and singing. If seeking answers to questions was the last activity, singing was the last one from the class routine's point of view. All instances of question answer need not be categorised as abrupt. What is to be noted is whether the activity in question reach its meaningful end or not. Here is an instance of a lesson ending with question-answers and singing.

Some of the questions he asked was among all the flowers which flower was the most beautiful. Most children said that the rose was beautiful. The next question he asked was what did the Rajakumari do to find out the most beautiful flower. The children are talking among themselves. The master pinches one child's ear and all other children keep quiet. The next question he asked was why did the flower asked the princess not to touch it. The children are not paying attention. The teacher tells let us sing a song.

The instance when a lesson ended with question-answers but not with singing is illustrated below.

T: I am going to ask one question which nobody has written.

What gives exercise to our body?

- S: Smile.
- *T:* Repeats the same question and students gives the answers.
- T: Is it an important question? You all missed it?
- T: You didn't read it carefully. If you read carefully you could find out this question.
- T: Did you understand?
- S: Yes. Yes.

(The bell rings)

The category, question-answers, is not restricted to only oral answering. It may be written work and may be the last activity the children were engaged in. Here is an example.

- T: Now I shall say and you write. Let me test your memory.
- T: All of you sit in your places.
- T: I will give the questions and you write down the answers.
- T: One, then you number it. Then the third information.

# **INSERT TABLE HERE**

Table 31: Ways in which the Learning Episode Ends

T: Shall I start.

S: Yes.

T: Are you ready to write? Which is the northern most district of Kerala?

(No body should say)

The map has been hanged here.

You need not write the questions. Just write down the answers.

*T: Have all of you written?* 

T: Which is the port in Kochi. Then shipyard. Which is the second shipyard in India. Do you know which is the first one?

Vishakapatanam

T: The next question

Which is the longest river in India?

(Question and answers continue till the bell rings.)

It was mentioned above that singing is a part of the class routine. If the class periods in the schools were found to start with singing, they were also found to end with singing. Here is an instance.

I had sung a song earlier. Can anyone sing that now? Ramya, you can sing that. Look into the book and sing. Sing loudly.

Ramsiya sings and other students repeat.

Ram: Velli padasarangalumai S: "

Ram: Thulli Maranchukalicheedum

Kam. Thaili Maranchakancheedar

Ram: Thuamalakale ningaley

S: " " "

Ram: Kalikaitham padipichu

Ramya sings the entire song and each line is repeated after her by other students.

(Following this there is a noisy environment in the class. Bell rings.

Question-answers or singing were not the only ways in which a class period ended. There were instances when the period ended while solving problems, while doing class work, with giving home assignment or with drill. Here are some examples to illustrate what is meant by each of these categories.

#### **Ending with problem solving (and singing):**

The next problem was solved by another child. Two girls volunteer and run towards the black board. These girls had already got a chance to solve the problem on the board. This was reported to the teacher by another child. The teacher says it is o.k. and asked one girl to solve the problem. There was one child who pointed out to the teacher that while copying the problems on one side of the board with the numbers one below the other teacher had made a mistake. Hence this child says that it has done the problem correctly. The teacher corrects herself. The teacher calls out to the next child to solve the problem. There are about 4 to 6 children who are weak. The other children get the answers of all the problems. The teacher asks all children to stand and sit. The teacher says all of you who have got the answers correct keep the books aside and let the other children copy the problem. He also instructions children who are not able to understand to ask children who understand and learn from

them. All the children keep away their books and get ready to sing a song. The teacher asks the children to sing.

## Lesson ending with class work (and singing):

- T: The leader of the  $1^{st}$  group come here and read.
- T: Linta, come here and read.
- T: Read loudly.
- S: Coconut scrapper
- T: Next
- S: Vessel
- T: Yes
- S: Tumbler
- T: Now, the leader of the  $2^{nd}$  group come here.
- T: Louder please.
- *S: Plate* ....
- T: Soupna, are you writing?
- T: If you finish soon, we can sing songs.
- T: Is milk bottle a utensil?
- S: No.
- T: You should say the name of utensil which helps your mother.
- T: Who is the leader of the VI group? Come and read.
- S: Vessel.
- T: Ram, Do you want to go and play? Write soon.
- *T: Read loudly.*
- S: Yes, Yes ....
- S: Vessel, Tumbler, Spoon etc.
- *T: Deepa, what is here?*

(Student's making sound)

- T: Now, let us sing a song. The song is about a cat. First I will sing.
- T: Pammi pammi poocha varunnai ... (Cat) .....
- *S:* Repeated the same lines).
- T: Do you like this song?
- S: Yes

(The bell rings)

#### **Ending with Home Assignment:**

She checks the work of another child and says, now you are still in 41 and we have reached 70. What were you doing till now. The teacher fills the answers on the board, which the children tell together. The teacher gives one more set 80 to 90 and 90 to 99 for the children to complete at home. The bell rings and children go home.

#### Closure with home assignment and writing:

She asks the children to take out their note-books and copy the months, the respective days in the month. She says what I have written on the board please copy it into your notebooks. She asks them to write neatly on the slate/book. She says tomorrow when you come, you must know the months by heart. She instructs them to first write that there are 12 months in the English calendar. The children take the book and start writing. They look at the board and write carefully. The teacher repeats don't make mistakes especially in the spellings.

#### **Ending the lesson with Drill:**

One child comes and shows the written work. The teacher sends the child away and tells you go to your place. The teacher scolds the children and asks them not to play with the desk. The next child is given a chance to read the pattern of reading is the same. They call out the letters, the teacher supplies the word and the other children repeat. The teacher goes to the other class. He tells do not sit quietly, do write. In one place the teacher uses two eyes and during repeating the teacher says two horns. The teacher goes in front and starts playing with the dust at the edge of the blackboard. One child is folding his hands and attempting to read. Another two children are playing with the chalk dust as they repeat. ON child is reading loudly. The teacher comes into the class and reads a complete sentence. The cow gives us milk. The children repeat the sentence. It is about 40 minutes now. The teacher calls to Krishna and asks him to read. The same exercise repeats. The teacher insists that they read the word after reading the alphabets. The children are not able to read the word. One child's legs are paining he just sits on the floor. The children are made to stand and read all the time. Some children are yawning. The teacher asks are your legs paining? The children say yes. The teacher says go and sit. The children ask permission to go to the toilet. The teacher allows all the children to go to the toilet. The teacher went to the other class and scolds the children.

An analysis of the data presented in the table above reveals that, the lessons in the primary classes of Palakkad district ended most often with oral or written question-answer or in the midst class work. Another most common way of ending a lesson was while solving problems, particularly when the teacher was teaching mathematics. Just as the lessons started abruptly on most occasions, the incidence of lessons ending abruptly was also high. If abrupt ending was very high in the government schools, it was high in other schools. It may be observed that, no clear pattern of ending a lesson was found in the remote tribal school. In the private aided schools, many classes were found to end with singing of a song. If the ending with songs was less in the rural government school, it was totally absent in the urban government school and the tribal school. Many classes in the rural schools, both private and government, ended with class work or with assigning home work to the children. Very few instances were found when the classes ended with drilling of a learnt material.

The incidence of abrupt stopping was more in the Malayalam classes of the government schools and the mathematics classes of the private schools. In the private schools, the Malayalam classes ended more often with oral or written question-answer and the incidence of such an ending was high in the government rural school as well.

#### **Evaluation**

The process of evaluation advocated by the DPEP is one of continuous and comprehensive evaluation. Like in the methodology of teaching, the earlier system of evaluation of awarding marks is replaced by a grading system. The criteria for evaluation are fixed for different classes. The criteria for evaluation at standards I and II, for example, are:

1. Speaking 8. Reading

2. Writing 9. Creative Expression – oral

3. Number Concept – I 10. Number Concept – II

4. Addition 11. Subtraction

5. Measurement 12. Problem Solving

6. Observation 13. Comparison

7. Classification 14. My Environment Book

It can be seen that these items of evaluation are at best areas for the development of competence. They are not specific enough for an objective testing. The DPEP in Kerala has kept the items of evaluation as areas of competency rather than items of competence which, incidentally, are found in the document of the Government of India on Minimum Levels of Learning. It was not very clear from the teachers or the trainers as to why the items of evaluation should not be specific.

This ambiguity in interpreting what should be the level of attainment for speaking, reading, writing or creative expression is found to have created a considerable amount of confusion among the teachers, children, parents and community. The general view held that "DPEP is singing and dancing and not learning", probably stems from the vagueness in specifying the learning outcomes. One must remember that this system of evaluation replaces an earlier system, which was specific in its evaluation though not acceptable. The teacher, the child and the parents knew that the evaluation would be focussed on what is provided in the textbook. Not only that a child could undertake self-study, or a parent provide tutorial help; the teachers organised it meticulously. This however led to a tradition of 'rote learning' which came to be viewed synonymously with primary schooling.

Evaluation is of the learning that has taken place through classroom experiences. Learning by all children is an aim of DPEP. Evaluation hence has to be criterion referenced and diagnostic rather than norm referenced. The frequency at which evaluation is undertaken is also important since it reflects the extent to which a child has approximated the goals. It is found that continuity in evaluation is advocated by the DPEP in its training. However, there is hardly any continuous evaluation practiced at the school level. Instructional experiences are provided as packaged activities with very little or no attention being given to evaluation. Questions asked by the teacher, the activities undertaken by the children are viewed to be different from evaluation. There is, for example, no recording of the attainment by different learners reflected through their participation in different learning experiences. Hence, evaluation hardly is diagnostic. In the absence of an emphasis on learning by all and need for remediation, evaluation is organised predominantly for its summative purposes. Every teacher is provided with evaluation sheets in which she has to maintain a record of the performance of every child on the stated areas thrice in a year.

The system of grading student learning is advocated by the trainers and is practiced at the school level. The strength of the earlier system of evaluation was its ability to demonstrate objectively the extent to which a child had learnt. Even though, the present approach could also demonstrate learning, what is demonstrated is not viewed by the parents in general and by the teachers to a certain extent as learning that should happen through a specially contrived process called schooling. That is the reason why the DPEP in Kerala has taken steps to orient the teachers and the parents about its philosophy of evaluation. It was reported by the teachers of KUPS, for example that zeroxed copies of detailed guidelines for conducting the evaluation were supplied by the DPEP personnel to the teachers. It was noticed through the present study, though, that the efforts made have not resulted in a general acceptance of the system. There are genuine questions raised, doubts expressed about its scientific nature, objectivity and appropriateness of the process and the practice of evaluation at the primary level. The fact that the English medium private schools still follow a system of awarding marks adds to the confusion existing.

Evaluation, like methodology of teaching, is also undertaken by way of activities. The difficulty, however, is of organising it in a large class. There seems to be a general practice that evaluation must happen on an announced date and should be completed within a stipulated time such as one working day. The private aided school in the rural area was an exception to this since the evaluation in this school was done competency wise and it extended beyond a school day.

Another problem that has started worrying the DPEP personnel, the teachers and the parents alike is the relative position of the child evaluated on a grading system with the one

who is evaluated on the marking system. When the child on a grading system seeks admission at a later date in an institution which follows the marking system, and if the seats are limited, what are his/her chances of being accepted and admitted. When there are two forms of evaluation simultaneously practiced, comparisons are inevitable. Mechanisms of converting grade positions into marks are not worked out. Given the fact that there is an apprehension about the accuracy and authenticity of a grading system among teachers and parents, it is difficult that this system becomes acceptable. Also apprehensions about the children evaluated on a grading system in Kerala becoming non-acceptable in a different state where the system followed is of marks has started surfacing. Questing such as "are all states practicing the grading system?" are heard more often in the discussions on evaluation.

During the course of this study, a total time of 690 minutes were spent on the observation of the practices of evaluation. It was found that the teachers generally follow the following criteria for grading the student performance during evaluation.

Grade A - A child who performs without any support from the teacher

Grade B - A child who performs with very little support from the teacher

Grade C - A child who requires more support for performance

Grade D - A child who is unable to perform

The following is an illustration of an evaluation session in standard I

The teacher picks a chart and asks where to hang it such that all can see. The children suggest the place and she hangs the chart with the consensus of the kids. The teacher asked the children not to talk and pay attention. She says" if you do well in the exams you can go to the next class. Today is an exam and hence keep quite". She says "don't get afraid. The exam today is fun. It is just what you have learnt. But what is necessary is that you must do it correctly and neatly. You will be awarded marks" (habitual statement). She asks all children to look at the chart. All children look towards the chart. The teacher says "listen to me carefully. I will ask you something and you must respond". She points to the picture of some animals. The children call out the names. For example, dog, buffalo, cow, elephant, squirrel, cat, crab, snake, fish, fox etc. This teacher has a chart in which she has stuck the feathers of different birds. The children identify the different animals and in case they are not able to, the teacher helps them to identify. She asks how does the snake move. The children say it moves slowly. The teacher asks how does the fly move. The children say that it flies. How about the crow?. The children say that the snake crawls, the fly flies and the crow walks and also flies. The teacher says that in this chart I have mixed a lot of letters. Try

and identify what are the animals hidden in this chart. Find out and write on the slate. Then the teacher enquires do you want to write all the names together or can we write it according to the way they move. The children agree to write it according to the movement of the animals. The teacher say do it as you like. But do it the way you think is better. At this point the teacher asks the children if they know the song of any animal. The children say that they know the song of an elephant. The children sang that song. Apart from the letters on the chart, the teacher also draws columns and writes the letters on the black board for the benefit of the children. The teacher asks the children to count the number of squares in the chart. They count and say it is 25.

The teacher writes each letter by allowing the children to call out the letters. The teacher repeats the instruction. She clarifies that one alphabet can be used as many times as they want. The teacher also explains to the children about the grading system. She also asks the children to bring their parents and she would explain to them about their performance. Further, the teacher clarifies that you can use the letter with the appropriate sign that is given on the chart like for example, if THI is given you cannot use THU. One child Sunitha starts crying because there is a caterpillar on her blouse. The teacher asks her not to cry but remove the caterpillar using a stick. She throws it outside. The teacher asked the children what is it? And the children replied that it is a caterpillar. She throws the insect out and consoles the child. The bright children go on asking her various clarifications. The teacher responds with patience. Sunitha stops crying and the children go to their places and start writing. The teacher also tells the children don't draw the square but only start writing the names. The teacher asks the kids to erase their slates well. She also instructs children who have more than one pencil to lend it to the child who does not have one. She scolds one child and asks her why can't she ask her father to by her a pencil. She instructs the whole class to bring the slates and pencil since they have exams. Some children have started writing and call out the names loudly to check if they are right. The teacher says sorry, I can't confirm them today since it is your exam. So go ahead and write. The teacher tells that you have time till the afternoon. One child is drawing the squares. The teacher observes it and asks her to start writing the names. The children are finding it difficult to form the words. The teacher goes around and says that you have to write the names of only creatures and not any word. The teacher says that this activity is for differentiation. The children are expected to write at least 10 names of animals and classify them according to the way they move. Next, the children are expected to select a word from this group and frame a simple sentence. The

teacher gives hints about different animals. For example, can you think of a bird which flies very high, an animal that is used during the temple festival, a bird that is seen in the night, the enemy of the cat etc. The teacher also says that there is one animal that lives both in water and on land. This animal jumps and swims in the well. The teacher says, go on thinking of the names of animals and see if you can find the appropriate letters in this chart. The teacher says try and think. Think of an insect that spreads disease. This teacher becomes anxious as the children are getting confused. She discusses with the other teacher. The children who do not write anything are given D. the teacher helps Swapna to differentiate the birds and animals. To the child who had not written the name, the teacher shows the picture of a cat. The child immediately recognises and writes cat (Pucha). The teacher asks him to write at least one word on his own. The teacher helps another child to identify the bird parrot. If the children classify the creatures with the help of the teacher, they are given D. C is given for children who are helped to form at least one or two words. The teacher goes around and says Swapna these words are not enough. She helps yet another child to classify. In spite of the good hints given by the teacher the children are not able to apply them. The teacher sits near a weak child and makes him write a letter A. Then she asks him to write LI. Then she says this is ALI, which means a rat. The teacher asks the child to classify and write. She says, if you do it on your own I will give you good marks. Go write and come. The teacher asks Sabira, who has not written anything. The teacher shows the picture of an elephant. Now she asks her to write "AANA" (elephant). The teacher helps another weak child to write "KAKA" (crow). The child writes and the teacher gives C Grade. The teacher helps Sunitha to write TAVALA (frog). The teacher asks the children to write one sentence using any word that they have written. The teacher goes round and checks the work of other children. There are 7 children who have got A grade and another children seven children who have been awarded B grade......(from the observation made at the AKMMLPS).

. There were instances when the teachers, instead using the grading system directly, regressed to the earlier method of allotting marks and they converted the marks in to grades subsequently. The following is an instance observed at the *rural government school* on the day of evaluation.

The children are given an activity of writing 'what they see and do'. The second topic on which they have to write was 'a journey that they had undertaken'. The third topic was 'the festival they saw' and the fourth, 'the game they like'. The children are expected to write on any one of the topics and they are given half an hour for doing so. The writing done by the

students are to be assessed on a marking system. The system of marking followed was as follows.

Hand writing – 5 marks

Correctness of spelling – 5 marks

Details – 5 marks

The teacher supervises the work and encourages the children to write well. He says that if you write well, you will get marks. If you write without making mistakes you will get more marks. And finally, for writing a lot you will get most marks. The children, after completing their work, are sent to play.

## **Equality of Opportunity to Learn**

The children attending primary schools come from different socio-economic background. The efforts at the school must be towards minimizing the inequality feeling among certain sections of the population of children who are otherwise discriminated against. In the classrooms efforts could be made to ensure that discrimination of children is not made because of their belongingness to a particular gender group, community group or ability group. The essence of the methodology of DPEP is to ensure that every child is provided with necessary and sufficient opportunity to learn.

Gender discrimination is a predominant cultural practice. Teachers, administrators and the community who form the adult influences on the growing children need to guard themselves against practices which make children conscious of their belongingness to a particular gender category. One of the criteria for selection of districts under the project DPEP has been the literacy percentage of girls in the district. If it is low in many a districts in India, the major cause for it comes from the discriminatory attitude towards the girls. The following gender discriminatory practices were observed in the primary schools of Palakkad district.

### Table 32: Gender Discriminatory Practices Observed in the Classroom

1. Separate seating arrangements for boys and girls - All schools

2. Formation of Groups in the Classroom separately forboys and girls during activity- All schools

3. Teacher utterances that make children conscious of their gender belongingness - Most teachers

4. Providing greater opportunity for one group over theOther- Many teachers

5. Group leaders from one category only

- Some teachers

The categories 3, 4 and 5 predominantly refer to the teacher attitude and bias. Instances of teachers telling "the girls will not be able to answer to this question because they don't play football", "see the boys have completed the work, you also should hurry up", "why the girls are silent? I will ask some questions to you now" are statements that reflect such happenings in classroom which could be avoided. It needs to be said that in most of the classes observed in the schools in urban area and one school in the rural area the teachers were more favourably disposed towards girl children and they had to make special efforts to involve boys. This is probably not the case in other states. It could mean that due to its practice of matriarchal system of family, a girl child is never likely to be looked at in the same manner in Kerala as is found in many other states.

Another discriminatory practice in the classroom stems from the legacy of caste and community system in India. The children belonging to forward community or economically sound families are likely to be attended to better than those who came either from disadvantaged families/communities and economically backward groups.

The following instances of discrimination leading to inequality in opportunity to learn were found in the primary classrooms of Palakkad district.

- 1. Children belonging to disadvantaged groups/communities were found to be seated separately in the classroom.
- The teacher shows an implicit preference for children belonging to forward community/groups throughout the lesson starting from the formation of groups for activities, selection of leaders, supervising and providing assistance during learning.
- 3. Disproportionate expression of pleasure and praise towards the work done in reading, writing, oral participation etc. by the children belonging to well to do families/advantaged groups.
- 4. Expression by a large number of teachers during interview that a certain category of children (belonging to disadvantaged groups) do not/cannot learn.
- 5. Expression by teachers in interview that they find it difficult to cope with the learning needs of children belonging to a certain category.
- 6. Emphasis by the teachers that "the parents of these children don't provide any help", "these parents don't come when we call them", "if the mid-day meals were

not given, they may not come to the school at all' etc. reflecting that certain category of children do not have any motivation/home background for learning.

#### **Incentives for Children**

In the state of Kerala, and hence in the district of Palakkad, the government has introduced a *Mid Day Meal* scheme for the children. The scheme was extended to all primary schools in Kerala in the year 1987. The government gives at the rate of 20 paise per student per day to a school with a student strength up to 100. For schools with higher strength, the rate is 10 paise per student per day. The school requires, on an average, Rs.800 to Rs.900 to prepare the meal. Rupees 20 –25 per day is paid to the cook. The Parent Teacher Association helps the school in meeting this expenditure. Each parent pays Rs.5-10 and some who can afford pay even more. The rice and gram are given to the school through the fair price shop and it is the responsibility of the H.M. to collect the same. The procedure to be followed for collecting the items is fairly tedious and the HMs in more than one school have expressed their displeasure in doing this task. The funds are released through the AEO of the range and there are instances when the schools have not received the funds in time.

In the urban government managed school, the Health and Nutrition Department of the Town Municipality provides *all children* with milk/bread/plantain/boiled rice in the afternoon.

The children in the tribal school are given a cash stipend by the government of Rs.75 per month. Of this amount Rs.5 per student is collected by the school to pay to the cook who prepares the mid day meal.

The government also has provision of distributing free text books to children. It was mentioned by the teachers that all girls, all SC, ST and OBC children are the beneficiaries of this scheme. It seems that the boys of the forward communities are the only category of children who are deprived of this facility. However, there were complaints about the delay in receiving the books by all schools and the children were found to undergo their education without literally having any text books. It was found, in the course of this study, that the teachers have adopted a via media of writing the lessons from the text book on large sheets of card paper and they hang them in front of the children when they used the text book.

## **SECTION IV**

## THE TRAINING CONTEXT AND THE TEACHERS

Palakkad is one amongst the three districts chosen for the first phase (expansion) of DPEP and the programme is being implemented since 1997. The district has in place the structures like PTA and MPTA (Mother Parent Teacher Association), School Welfare Committees, School Resource Groups, Village Education Committees at the school level, the Lead School and the Cluster Resource Group at the cluster level, Block Resource Group and Block Advisory Committee at the block level, the District Resource Group, the District Monitoring Cell at the district level and the State Resource Group and State Advisory Committee at the State level. Figure 1 provides the organisational structure for the implementation of the DPEP in the state.

The staffing of the Block Resource Centre is as follows:

Administrative Category 1

Academic Category (DIET faculty) 1

Trainers 10

The duties and responsibilities of the BRC are:

- to conduct training programmes for teachers, CRC heads, Head Masters, VEC Secretaries
- to pay academic visits to at least five schools every week for providing on the job support to teachers in academic activities of the class.
- to convene VEC/CRC/school level meetings of functionaries including teachers, whenever necessary in consultation with the BRC Coordinator
- to identify innovative learning/teaching practice in school/class, consolidate them and motivate other schools to adopt/adapt them

- to attend the weekly review and planning meeting at BRC
- to identify the training needs of the teachers
- to give academic support to teachers for undertaking action research
- to try out/experiment innovative classroom practices identified/developed at the school which is adopted by the BRC.

## **Training Received by the Teachers**

Since the inception of the programme the district has witnessed several training programmes and the sequences of training provided to the teachers *according to the trainers* are as follows:

- Five day initial training on pedagogy and activity based curriculum (ABC) approach
- Three- day training, separately for classes I and II and for III and IV on language approach, integrated approach, projects, etc.
- Cluster meetings of one day per month for review and planning
- Three day training on approach to evaluation and grading indicators
- Kingnikootam training-I of 5-day duration for capacity building
- Kingnikootam training –II of 5-day duration in summer vacation followed by 7-day field experience
- Evaluation training for developing evaluation tools of 1-day duration

The year 1997-98 witnessed the introduction of a variety of inputs for making the classroom process "activity based and experiential for facilitating learning by children. The Kingnikootam training is currently being implemented in the district and has been designed on the observations made by the internal academic support mission held in the month of March 1998. The objective of this mission was to study the process involved in and the impact of the various activities taken up under the District Primary Education Programme from the year 1997-98 in order to design training inputs for the year 1998-99. The Mission has observed a few lacunae with respect to the classroom which are given below:

1. Common activities were forced on all children. A rigid time frame with predicted results are still going on in the classrooms

- 2. Slow learning children do not get sufficient time to successfully complete the tasks in comparison to those who learn faster
- 3. The teacher could not give sufficient help to the slow learning children or get another task of a lesser difficulty
- 4. The school atmosphere continues to be unattractive and uninteresting to the children

The Mission observed that there exists a need for upgradation of skills and concepts among teachers and for development of a favourable attitude in them. For doing so the Mission suggests that the training programme must be made more interactive, experiential and the methodology of training be made more problem focussed with sufficient hands on experience (field experience).

As a result the Kingnikootam training is designed to address the issues of classroom learning processes and teacher competencies to handle the multi level and multigrade issues, develop and try out strategies for managing poor learning in multi level learning context and try out new teaching strategies like team teaching. The expected outcomes of this training input are to enable teachers:

- 1. To develop clear work strategies to make the classroom process activity based and child centred.
- 2. Design and try out strategies, activities and management techniques for addressing the issue of multi level situation in the classroom
- 3. Support professionally in applying their understanding about the children and the learning process in all classroom situations.

#### The Teachers

The primary school teacher is a key functionary in the implementation of the DPEP. One of the major areas of transformation other than the curriculum is the competence and attitude of teachers. With a change in the curriculum, the methodology and the system of evaluation an effort to upgrade/develop teacher competence became essential under the DPEP. *According to the teachers*, several teacher training programmes have been undertaken in the district of Palakkad to equip the teachers.

Training provided to the teachers have been as follows:

Five day initial training on pedagogy and activity based curriculum (ABC) approach

- Three day training, separately for classes I and II and for III and IV on language approach, integrated approach, projects, etc.
- Cluster meetings of one day per month for review and planning
- Three day training on approach to evaluation and grading indicators
- Kingnikootam training-I of 5-day duration for capacity building
- Kingnikootam training –II of 5-day duration in summer vacation followed by 7-day field experience
- Evaluation training for developing evaluation tools of 1-day duration

These trainings were aimed at developing awareness about the inadequacy of the existing system and practices of primary education, a vision of the goals of primary education, an understanding of the methodology suitable for achieving the goals and of assessing its achievement.

The teachers including the headmistress were asked what in their view was the aim of primary education. The response have been as follows:

Table 33
Proportion of Teachers Stating Different Goals of Primary Education

1. Children should disciplined behaviour	18/18
2. Develop good behaviour (Achadakkam)	18/18
3. Improvement economic status/Secure a job	15/18
4. Develop self confidence	12/18
5. Be independent	10/18
6. Able to read and write	8/18
7. Numerical ability	6/18
8. Understand environment	6/18
9. To live with others	6/18

Pupils discipline and development of good behaviour in them seems to be the most agreed upon goals of primary education among the teachers. Their perceptions about the need for discipline, what they mean by discipline are similar whereas some differences on the methods/approaches to achieve these goals exist. The following excerpts from the interview with teachers reflect this.

"Students must learn good habits, behave well and education must see that they bloom into better citizens. We tell this to the students both formally and informally. Teachers correct them when they go wrong. Children are advised when they fight among themselves, use bad language and also when they don't follow any discipline. Discipline and essential part of education. Children are often taught not to be selfish, to be calm, not to be naughty, not to climb trees etc. I remember that a child had fallen from the gooseberry tree and this has created a lot of problem in the school.

It is the responsibility of the teachers to teach discipline to the children from different house holds. Hence we should take responsibility to train the children. In the process of showing them what is right, the teacher may resort to scolding and sometimes even using the stick. The stick is used not necessarily to pain the students but more as warning for the other kids." (from the interview of a teacher in round 2)

"We educate children so that it is helpful for them in their lives. It helps them to gain ability to live and to secure a job. Education must teach them how to live in the community. There is a need for discipline, which have to be taught in the classroom. Discipline is required among the children so that we can teach them in the way that we want to. Discipline must include punctuality, concentration in what is being taught in the class, to imitate the good in other friends and respect and interact well with the community. The child must learn to be humble and respect older people.

There is no particular coaching with respect to discipline. However, this can be done during classroom teaching, interacting with children informally and observing their individual behaviour inside and outside the class." (from teacher's interview in round 2)

Child's personality and social development, hence seems to be the over-ridding concern among the teachers in the course of their teaching. Even while accepting them to be the nurturant effect of schooling in general, the direct effect of classroom instruction seems to be not the concern of several teachers. This may partly be due to the lack of specificity in defining the objectives in the framework of evaluation.

The DPEP advocates an activity based experiential learning environment in the classrooms which are joyful. The teachers were asked about their reactions to the methodology advocated by the DPEP, the training support they received and their competence to follow the methodology in the classroom. This must be viewed in the

background that the primary classrooms are yet not out of the structured, textbook oriented instruction and that many teachers implement the activity based approach rather as package without necessarily having an ability to modify/enlarge the activities such that all children in the class attain the desired outcomes.

There seems to be a general acceptance that the method is useful in that it makes the children participative. However, a large number of teachers interviewed were also of the opinion that the method by itself is not sufficient, that it hardly helps in ensuring discipline among children and that it is too demanding.

Table 34: Teacher Reaction to the DPEP Approach to Teaching

1	The method is useful	18/19
2	The method is not sufficient because the children are required to	12/18
	memorise and learn through writing	
3	The method is not practical in the classroom especially because	13/18
	all children cannot be included in it	
4	It is rather difficult to plan and undertake this approach to	9/18
	teaching in the class	
5	It is not feasible because there are no sufficient teaching aids	7/18
	provided to the teachers	

A few illustrative reactions of teachers have been given in the following:

### **Illustration 1:**

The DPEP scheme is good but the method has more problems than strength. Weak students are not able to cope with this new method. The entire activity is concentrated on the teacher. The method hardly gives the teacher any time to help the weak students. The opportunity to help the weaker students either by myself or with the help of the bright kids in the class is very less.

#### Illustration 2:

The method is introduced for the past one and a half years. Students are learning but are not making satisfactory progress. It takes too much of time. This method is against the interest of the poor sections of the society. The children are not taught the alphabets clearly. The teachers are protesting. With this new method the children are well versed with the basics. The methods give more importance to oral skills. Writing is not given due importance. The children are not given any practice in writing. Many teachers are apprehensive of the usefulness of this method. They believe that the children's capacity increased but this could

be used only in certain instances. It also takes more time for the child to learn through this method. It requires constant supervision by the teacher. The children are happy. In this method the parent cannot help the children so there is confusion.

### Illustration 3:

DPEP scheme is good but the teachers also feel that the method is not efficient. Their main problem is that the evaluation is not connected to the actual classroom learning. The textbooks are not issued in time. The Syllabus with the present method is light.

Any approach to teaching, whether new of old, will have a philosophical basis for its practice. A teacher must agree with the basic philosophy and must have the outlook to give it a fair try. Many a teachers observed in this study did not have a belief that the method is useful. They seem to have a nostalgic memory of the earlier approach as evident in their statement that:

T1: the children must be taught alphabets, discipline and how to respect parents and teachers. School education is one way of teaching discipline. This is not possible in the DPEP Approach. The method does not work in all grades .... Moreover, the teacher must have autonomy to choose the method.

T2: After we have started teaching through the new method, children ask us questions. Sometimes their questions are strange and some times we ourselves are not equipped to answer their questions. This method of inquiring, reasoning and analytical skills is good, but only after they get their fundamentals straight.

T3: The older children who learnt in the traditional method were much better in reading and writing. But these kids are not able to read even whey they reach the III standard.

T4: We will give work to other students as in the old method and we concentrate on these (weak) students and force them to write ..... The weak students used to sit at the last bench. In DPEP method we follow a ` 'shaped seating plan. We cannot make them sit at the back.

Many of these teachers were also the ones who did not send their children to Malayalam medium schools. Rather, their children were being educated in the English medium schools.

This was true of the teachers in all schools except the tribal Tamil medium school. When it came to practice, the teachers were trying to implement the activity based approach whereas their basic stance was one of teacher centred instruction. The following excerpts are given as illustration to the above statement

There seems to be a general dissatisfaction regarding the support received by the teachers from the BRC trainers. This is particularly more among the upper primary school teachers. Even though they are not required to use the methodology, they seem to have developed an opinion. It could also be due to the fact that they too could have become BRC trainers if selected. The teachers are having several reasons regarding their dissatisfaction. A few main reasons expressed are as follows:

- The trainers are not able to demonstrate sufficiently
- The trainers adopt advising
- The trainers supervise and tend to criticize the teachers
- The trainers come to find fault

The upper primary school teachers interviewed were very critical of the DPEP as a project and of the training support provided. Their reaction to the methodology is not a studied one because none of them are trained in it. It may be necessary to note that while bringing about a change in a school efforts must be to include all the functionaries so that there is no discordant note or demotivating influence on those teachers who practice the method.

The community too seems to have an adverse opinion about the DPEP in general. They seem to find an effort to deprive certain sections of the community through this project because many children from the well to do family are not required to undergo this programme since they are enrolled in the English medium private schools which do not follow the DPEP curriculum or method. According to a teacher the community views with suspicion the DPEP and feels that there is a differentiation to split the community among rich and poor. Some feel that it is not for the states like Kerala. According to them, it may be useful for backward states like Rajasthan or Uttar Pradesh.

Kerala is a highly politically aware state. Most teachers have their political affiliations to one party or the other. So is the case with the community members. Certain political parties have opposed the implementation of DPEP in Kerala. This is reflected through the voices of the teachers as well as community members.

## **SECTION V**

# FINDINGS AND IMPLICATIONS

This section contains the main findings and the implications from them. The findings are arranged in sections under two heads, the status and the context.

### The Background

The six districts, Kasargod, Malappuram, Vynad, Thiruvananthapuram, Idukki and Palakkad were chosen as the DPEP districts in Kerala on the criterion that the Total Literacy Campaign had been successful and it generated an enhanced demand for elementary education. However, the other criterion of lower literacy percentage of girls than the national average is not applicable to any of the districts in Kerala.

Palakkad is one amongst the three districts chosen for the first phase (expansion) of DPEP and the programme is being implemented since 1997. The district has in place the structures like PTA and MPTA (Mother Parent Teacher Association), School Welfare Committees, School Resource Groups, Village Education Committees at the school level, the Lead School and the Cluster Resource Group at the cluster level, Block Resource Group and Block Advisory Committee at the block level, the District Resource Group, the District Monitoring Cell at the district level and the State Resource Group and State Advisory Committee at the State level.

The present study is undertaken with the purpose of establishing benchmark on the classroom process in different contexts of primary education in Kerala. Hence the study was planned to provide a descriptive picture of classroom processes and interactions in diverse school/community contexts in the form of comparative case studies. The study is expected to reflect the diverse contexts in each of the selected primary schools in the district of Palakkad. For representing the diverse context it was necessary to include different types of primary schools under the study. After a study of the records maintained on the school at the district HQ, and in consultation with the District Project Office staff of DPEP at Palkkad 5 types of

schools was selected. The five types of school are Malayalam medium government managed schools located in urban and in rural area, Malayalam medium private aided schools located in urban and in rural area, and a remote Tamil medium tribal school.

### Section I. The Status

### Starting of the School

It was found that all primary schools do not follow the same time either for starting of closing. As per stipulation the schools should start at 10.00a.m. and close at 4.00p.m. It was observed that the government schools did not adhere to this stipulation and were found to start on time but closed early on most occasions. The private aided schools worked for a longer duration and sometimes started as early as 9.30a.m. and worked even beyond 4.00p.m. The intermittent breaks provided to the children were also not the same across the schools. Usually a 10-15 minute break around 11.30 a.m. and 3.15 p.m. and a one hour lunch break between 12.30 p.m. to 2.30 p.m. were provided.

It was observed that the schools follow a separate schedule on Fridays if they are located in the Muslim locality or if they cater to Muslim children. This is particularly to help the Muslim children to attend the Namaz in the noon. The classes in both the private schools observed were found to start early by half an hour and instead of one hour break for lunch a one and a half-hour break was provided. This however does not apply to the tribal school covered under the study, which had no definite starting, or closing time. At least on four occasions the school did not start before 11.00 a.m. This however does not mean that the teacher was not available since they were provided with residential quarters facility by the Government which was very near to the school building.

The schools have mechanism whereby the administrative control and supervision starts with the starting of the school itself. It is done either in the form of teachers signing an attendance kept in the HM's room or collecting the student attendance register from HM.s room in the morning and depositing it back at the time of closing or more directly through the practice of getting the initials of the HM on the lesson notes prepared by the teachers for the day as was observed in one of the private schools.

It is expected that all teachers including the Headmaster and the children are available at the time that the school starts. It was observed in the study that on many occasions the teachers and sometimes the Headmaster were not present at the time of the starting of the

school. This was more often found in the government lower primary schools than in the private management schools. This did not affect the starting time of the school except in the case of the tribal school. Whichever teacher was present at the time of starting, undertook school routines and started the school.

The DPEP envisages that the teachers spend at least 45 minutes in a day in planning for the instructional activities of the next day and meet once in a month for longer duration planning or for discussing any other issues at the classroom level. The Cluster Resource Persons and the Block Resource Person, who are the trainers, are expected to organise this meeting as stated in the functions of the BRC. This would mean that the students and the teachers would not have the same time of closing. The classes are expected to be organised till 3.15 p.m. after which the children either play or go home whereas the SRG will meet for planning till 4.00 p.m. which is the actual closing time of the school. It was observed that on most occasions the closing time for the children and the teachers were the same and ranged between 3.00 p.m. to 3.30 p.m. In other words even though the SRG existed on paper it did not exist in reality to fulfill whatever functions it was meant for.

the attendance of teachers varies from school to school and in no case all the teachers were present either at the start or at the end of the school. This extreme situation existed among the remote schools. A major reason for teachers' not being present at the start of the school seems to be the distance traveled by them. Most teachers, except in the tribal school, reside at a distance of 1 to 10 kms from the school. The average distance traveled by a teacher was found to be 6.09 kms. In case of the tribal school, the government has provided housing facilities near the school for all teachers. This should apparently mean that these schools should start right on time since the teachers do not have to commute. This, however, was not the case since *on no occasion of school visit were all teachers present at the school* and on most of the occasions they were found to remain in their quarters even beyond the starting time of the school.

#### **Combined classes**

Kerala is a state, which has provided one teacher for every class. Hence it is claimed that there are no multigrade primary schools in the state. Teacher absenteeism and teacher irregularity in fact makes it necessary that either the classes of teachers who are absent are combined with some other class or attended by some other teacher during the course of teaching in her class. The observations in this study were made in three rounds of two days in each round. During the course of the field visit there was not a single day in any of the

schools observed when one or the other class/section was not combined with another. If on some occasions such a class period was one, on other occasions the combined classes were observed throughout the day.

The general practice is that when a teacher is absent, a teacher who is present "simultaneously supervises" two classes. Some revision exercise is given to both the classes and a single teacher supervises and corrects the work of children from both the classes. Under such circumstances instruction as planned activity is not found. Whereas, learning was made possible even on such occasions in one of the private schools. Since the teachers make a common plan for each section, it was possible to integrate the additional number with the class. The teacher does not resort to mechanical activity but continues with the implementation of the plan which was made collectively by the teachers in the previous week. Even though the difficulty of teaching to a larger group exists, continuity in learning was achieved. It was also found that the classes, which were to be engaged by the HM, were the classes to be combined on many occasions. This was because the HM was busy doing some administrative work or had gone out of the school to attend to some administrative responsibility.

#### **Enrollment, Retention and Attendance of Children**

Kerala is a highly literate state where a high degree of demand for education exists, be it in city, town, village or interior settlement. Hence, school enrollment and retention figures are very high in the state. Even though the parents favour the education of their children, there seems to be an increasing preference shown for English medium schools than the Malayalam medium schools. Several Malayalam medium schools have witnessed a drop in the enrollment figures or the strength of the school. Some of them had to close down a section and/or terminate a teacher, as was the case in one of the private schools observed.

The attitude of the community and in particular of the parents who believe that good education means "formalised instruction, note learning, seeking marks in well structured evaluation system" find that the introduction of the activity based approach (of DPEP) in the government and private management schools is a ploy to further the gap between the rich and the poor. They would like the child to demonstrate progress, which they link closely with reading and writing. Such a progress, according to them, was visible in the children attending Malayalam medium schools before the introduction of activity based joyful learning and

which is visible now in the children attending English medium schools. The absence of homework bothers a large number of parents and teachers.

The DPEP has provided volunteers for conducting enrollment drives. Such a drive is needed in remote areas where children are not yet enrolled. This is particularly true of the tribal areas of the district of Palakkad. After completing their primary schooling, the children are to attend the upper primary education, which starts at standard V in the state. There seems to be a peculiar phenomenon of re-enrollment after completion of the IV standard, in the tribal Tamil medium school. There were at least four such children who had re-enrolled themselves. If on the one hand, their poor competence in reading and writing made them unacceptable in a school with higher classes, the lure of incentive schemes, especially monetary gain, encouraged the parents to send them back into the primary school. This, however, was not done with great joy and the parents were concerned that their children are unable to complete their schooling and are unable to read and write even after four years of schooling.

The attendance of students varied from school to school. It was lowest in the case of the tribal primary school. The government schools which are urban, and private schools irrespective of their location were well attended by both boys and girls. Children best attended the private aided schools. It is possible that the figures available on records, especially of remote schools might not be fully reliable as was found during this study. In the government schools the attendance of girls was higher than that of boys whereas in the private schools it was vice-versa. The student attendance is influenced by the seasonal variations especially the period connected with agriculture and monsoon, as reported.

#### **Daily Scheduling of Teaching**

Malayalam is taught for a relatively longer duration during the day followed by mathematics and environmental studies. Standard I children spend more time on Malayalam as compared to those in standard IV, who seem to spend more time on mathematics. The later part towards the end of the forenoon and the afternoon sessions, one finds that the children are engaged in either lighter activity such as play, singing and dancing or are engaged in mechanical activities such as writing, problem solving or such other exercises. However, this is not followed uniformly either within or across the schools. It was noticed that the children are put on mechanical or repetitive exercises when the regular teacher of the class is not available to them, if they belong to higher classes. On the contrary one finds that the children

in the lower classes are likely to be engaged in playing or singing or are kept idle if their teacher is not available. There were hardly any instances of children present in their class and kept totally idling if they are attending private management schools, whereas the children who attend the government primary school, throughout their primary classes will have found themselves to be sitting idle in the class on numerous occasions.

At the primary level, as per the curriculum, learning experiences are to be organised in the non-cognitive areas of Health and Physical Education, Art Education and Work Experience. It was observed that these areas are generally neglected in the scheduling of instructional time. If some schools had not made any provision for them in the transaction, others had considered it sufficient if these classes are held occasionally. In one of the private schools for example, it was reported that 5 minutes are reduced from other periods to accommodate a 15 minute Art Education class on certain days.

#### **Role of the Headmistress**

Headmistress of a primary school is responsible for all the activities that happen in the school. As a manager she designs the time schedule, supervises instructional activities, interacts with the community, arranges meeting of school and community organisations and administers the school officially and organisationally. The Headmistress is the most experienced among the teachers by virtue of her length of service as a teacher. Being a teacher, the Headmistress is also to undertake teaching in one of the classes. It was noticed that with respect to teaching there are two types of Headmistress working in the primary schools. Those who consider that administration is their primary responsibility and the others who want to but are unable to attend to teaching regularly. With respect to punctuality it was observed that a Headmistress is no different from the teachers. She also comes late, goes early or takes leave. When the Headmistress is present in the school she conducts assembly, oversees the lesson notes prepared by teachers allocates work other than teaching to other teachers, supervises arrangements for activities of the school such as meetings of PTA etc., undertakes liason work with community in improving the school facilities and implementation of incentive schemes such as mid-day meal. It is found that due to her belief that she is an administrator and not an academic, the Headmistress knowingly or unknowingly adversely influences the functioning of the school and learning there in. For example, the class which is assigned to the Headmistress is generally found to be either looked after by some other teacher or is involved in rote learning and repetitive activities for

a substantial time in the day since they do not require the presence of the teacher. The Headmistress also unwittingly, is an interruption to a class that is otherwise involved in learning. She peeps into or engages in talking to teachers in the middle of the class. This is primarily because of the thinking that the consultation, which she does with a teacher, is more important than the learning of the children.

#### **Planning of Instructional Activities**

The teachers generally have no specific time when they undertook planning of instructional activities. It is done usually during the school hours thereby affecting instructional activities. In two schools, however, the teachers either undertook planning at the end of the day or were utilising after school hours for planning. It was found that the sincerity in planning instructional activities was more prevalent among the BRC trainers who regularly visit the schools and undertake planning exercises with the teachers than that was found in the teachers. Except in two schools, the teachers did not regularly undertake planning and there was hardly any coordination between what happened in one section and the other of the same grade on a specific school day.

#### An Estimation of the Loss of Instructional Time

In the state of Kerala, primary curriculum consists four academic years of shooling. In an academic year, a minimum number of weeks of working are prescribed for the schools and every week has six working days. Except for Saturdays, a day's work is divided in to two sessions, before lunch break and after. Four class periods are to be organised in each of the two sessions. Hence, the instructional time in a day consists of eight class periods.

Any objective based learning at primary level requires the mediation of teacher in many ways like imparting direct instruction, facilitating group work and providing feedback on individual work. The time given by the teacher to all such activities constitutes *opportunity time*. Hence, a loss of instructional time for a student means a reduction in the opportunity time available to him.

Estimation of opportunity time has been made at two levels in this study. In the first level, a class period has been taken as a unit. Here, estimation of the loss of instructional time for the duration of a period, a session and a day has been made for each of the four primary classes in the five schools observed. At the second level, the analysis has been made of the loss of instructional time within a class period by taking time in minutes as the unit. They were subsequently summed for each class in the five schools.

The following estimations of the loss of instructional time have been made.

Average loss in the government schools: More than one out of every three days (.335)

Average loss in the private aided schools: Less than one out of every twenty days (.045)

Average loss in the tribal school: More than two out of every five days (.411)

It can be seen from the data above that the maximum loss of instructional time happens in the remote tribal schools of the district. The loss of time is also very high in the government schools. The scenario in the private aided schools is far better since only one in twenty days is lost. Further analysis of the data reveled that the loss of instructional time across grades was more or less similar. Among the grades the loss was maximum in standard I in both government and private schools. In the government schools, the classes, which were to be engaged by the HM, suffered the maximum loss of instructional time. An analysis of the reasons reveals that, the most common reason for large scale loss of instructional time was either the 'delayed start' of the school or the 'early closure' of the school or that the 'non availability of the teacher' to the students of a particular class.

An analysis of the reasons for of the loss of instructional time in classes in which the teacher is present reveals that, in both government and private schools alike, 'engagement activities' account for a maximum loss and almost an equal amount of time was lost in the government schools when the teacher was present but the children are not provided with any instructional input. The incidence of this reason was very less in the private aided schools.

#### **Starting of the Class**

Starting of a learning episode assumes importance from the point of view of facilitating the construction of knowledge by the children. Children need to relate the new experiences to their existing knowledge or recognising the relevance of the experience in the form of an activity in relation to their own needs. A learning experience provided abruptly does not reflect the thinking that the children need to be readied for undergoing the experience. From the point of view of the participation of the children, the starting affects their interest and motivation.

It is found that songs are the most common ways for starting a class if what is taught is Malayalam or EVS. In some cases mathematics classes also began with songs. In some schools, the children read out the diary they have written about their experiences of the previous day. Some times the teacher goes round the class and looks into these diaries. The

teacher gives instructions about an activity and organizes the same. This is when the teacher is implementing what she has planned. There are occasions, however, when the teacher uses some additional activities such as clapping, hand movement and sit-stand for making the children ready. It was found that the teachers do not use songs or warm up exercises as a preamble to work that the children have to do if the teacher was not a regular teacher of that class and had no instructional plan to implement.

most often the classes began abruptly, even though the incidence of such a beginning was less in the private schools. Apart from abrupt beginning, the classes in the schools of Palakkad district began with an activity. This, incidentally, is an expectation of the trainers from the teachers. In this regard, the tribal school was different. In this school there were no activities at all. Rather than starting abruptly with an activity, the teachers in the tribal school started their classes with informal questions. Lessons beginning with follow-up and recapitulation were more in the private aided schools. The least probable way of starting a class, though the most desirable, was by providing a context.

An analysis of the starting of the class across subjects reveals that, irrespective of the subject being taught, the classes started abruptly. The teachers did not use informal questions to begin a mathematics class as much as they did so in the Malayalam and EVS classes. Also, the teachers, while teaching EVS did not start with reading and class work as much as they did it in Malayalam and mathematics. The incidence of starting a mathematics class by providing context was less than that of Malayalam and EVS.

### **Organising Activity Based Teaching**

Activity is an integral part of every lesson in the primary classes of Palakkad district. As said earlier, the tribal school is a total exception to this rule since none of the classes there wee with activity. Occassionally, due to combining of classes and teacher absenteeism, the classes in government schools were without activity., The teacher absenteeism, however, did not influence the organistion of activities in the private aided schools. Organising activity in the combined classes, when the teacher of the other section was absent faced a special challenge to the teachers. If the teachers in the private schools were found to put extra efforts to make even such classes truly activity based, those in the government urban school did not try enough to cope with situation,. The activities in such classes were truly haphazard. A major reason for the failure in implementing activity based teaching in the government schools comes from the fact that the teachers had not yet started believing in the philosophy of it,. Nor were they found to have the commitment to the cause of educating children as

much as those in the private schools. The activities organised in the afternoon in the government schools, for example, were more of a routine attempt to keep the children engaged.

It was found that, on an average 2 to 3 activities were organised in a class period. The number of activities in a class period were maximum in standard I and there were instances when as many as five activities were organised in one class period in three schools. If the activities were of a shorter duration and were more in member in standards I and II, they were less in number and of longer duration in standards III and IV.

The activities planned by the teachers are for small group work. 5-8 children form a group. Organising activities seems to be done sincerely but without the ingenuity shown by a teacher to understand its philosophy. There were instances when a teacher went from one competency to the other in the same class period such as from number concept to odd and even numbers to oral addition. Unless these were revision exercises it is extremely difficult to imagine that the students would proceed from one level of the ability to the other within the short time of a class period. In fact, instructional time is a variable in the learning paradigm which underlines the competency based teaching. The teachers did not spend sufficient time on planning or they did not consider that it is essential. As a result, such teachers repeated an activity, which they had planned for an earlier class. Even the levels of experience provided change from one to the other in a given class period itself. There are instances when a teacher used an inappropriate experience to the grade to which she was teaching. Instances were observed when the speed with which the teacher shifts from one activity to the other is not in accordance with the learning capacity of the children. This is particularly true of teaching of mathematics and is also found in the teaching of Malayalam and EVS. In such classes the teacher seems to be in a hurry to complete the activities planned without much of an attention being given to learning. Experiential learning, hence, has remained in philosophy than it is seen in practice.

While organising the activity based approach, every child has to undergo the experience intended. 'Learner' is the unit of learning and not the 'class' as a whole. Experiential learning to be organised in the group context of a classroom seems to pose some problems to the teachers. Some children tend to monopolise the participations more than the others, which would not ensure learning by all. Teachers need to resist the tendency of 'getting correct answers and moving ahead with the activity/session'. If not done, the activity based

methodology being practiced may not be much different from the earlier textbook based approach where 'completing the lesson' was the *be all and end all* of teaching.

### **Pupil Participation**

The methodology advocated by DPEP can be best described as activity based, experiential learning. It views pupil participation as paramount to learning unlike the earlier emphasis on teacher activity. Participation of the learner during the course of a learning episode is considered important. An analysis of the degree of participation of children in a learning episode has been made. The predominant category of participation in the classroom happens to be either of the leaders of groups formed by the teacher or of less than 5 children of the class. It may be mentioned that in most cases the children who are the leaders in a group activity are also the ones who participate when the learning episode is not a group activity. There has been no instance when all the children of the class participated in an activity till its completion or till the learning occurred. Even in those cases where the teacher took extreme care to involve children, she could not do so completely because these were also the classes where the number of children in a class was large. However, an instance of participation by all children in individual work (writing) was observed in a class where team teaching was organised. This has been taken as an exception to a 'monograde teaching context' where only one teacher ought to be available at a time to any given class.

The learning experiences provided in the primary classes of Palakkad are of three distinct types – individual, small group and whole class activities. By individual activity, it is meant, that every learner works by herself/himself without any interaction with another learner. The individual activities are generally organised in the form of writing work by the children and are found either at the consolidation stage of a lesson or, when a practice of the behaviour is thought necessary by the teacher. However, practice, drill and repetition do not form a part of the activity based approach where learning is more a 'construction' rather than 'a mechanical acquisition'.

There were very few instances in the remote tribal school when the children were engaged in individual activity as compared to the other schools. Except in this school, the children were doing the intended work when they were engaged in the individual activity. On a large number of occasions, the children in the government schools were also sitting quietly without doing any work. This would mean that, if on the one hand there were children engaging themselves in the activity, on the other hand there were other children on the same

occasion and all children on some occasions who sat quietly without doing any work. Also, the children in the government schools were more restless during an activity and were found engaged in talking among themselves and doing some unconnected work. They were also found moving around in the class and fighting with some other child. The incidence of these behaviours was much less in the private aided schools. In other words, even though the teachers in both private and government schools employed individual activity in teaching, those in the government schools were not ensuring the participation of all children through supervision and monitoring on a greater number of occasions. The fact that, in every class observed in the tribal school, the children were found sitting quietly goes to show that the children either did not participate in the class or since the classes here were devoid of activity, they were too scared of the teachers to speak anything. Both these were true as discussed elsewhere. There were very few instances in the schools of Palakkad district when the children were found copying from the others. The trend discussed above was almost similar across subjects as well.

It was found that the schools in the district had been practicing activity based approach involving small group activity, except the remote tribal school. It was observed that usually a group consists of 5-8 children and it has a leader who organises the activity within the small group and reports after completion of the activity to the teacher. This means that the leader has greater opportunity to all learners, participate and interact with the teacher. For providing equal opportunity, the leader should be changed from activity to activity. However, the practice is that an 'intelligent', 'confident' and 'expressive' child with fluency in speech is permanently chosen for the leadership. Even on those occasions when a leader is not required for the activity, teacher gives greater opportunity for this child by pin-pointing who should respond. Not only is that the leader is permanently chosen, some schools have gone a step ahead in structuring the group by even permanently forming the groups. Therefore many a times it has been observed that the students fall into 'their groups' the moment the teacher indicates them to do so. Such permanent groups are a restriction on learner interactions. In some cases, there seems to be an implicit thinking by the teacher that some are more capable than the others. This gets communicated to the children as well. In heterogeneous groups, if the leader is 'the favoured child' there are instances of making homogenous groups where an entire group is of a lower ability. This affects the democratic structure of the classroom and as a value is not in tune with the philosophy of DPEP.

The third category of activities is the large group activity where the entire class is treated as one group. Children in such classes are not given any individual work but are in interaction with the teacher. The teacher plays a more predominant role in such situations and explanations made by the teacher constitutes a substantial time of the period. the children in the private aided schools were listening and responding to the teacher on almost all occasions whereas the occurrence of these categories were relatively lesser in the government schools. From the fact that the children in the government schools were also engaged in several other behaviours goes to indicate that they were less attentive to the explanations of the teacher than their counter parts in the private schools. There were occasions in the private schools, however, when the children were not involved and were sitting or standing quietly. Further, it may be noted that the occasions when children were listening to the teacher were more than those when they were responding in the class rooms of the tribal school shows that the children either did not understand what was happening in the class or that they were routinely involved in those gestures which reflected listening. Both these were true since it was in this school that the children of fourth standard did not know addition, that the school had not produced even one student who had successfully completed the ten years of schooling and had passed the SSC examination, and that the children were found to reenroll themselves after standard IV in the same school.

At any point of time more than 50% of the children are not fully attending to the teacher with a view to understanding what she is explaining. They were found talking among themselves, fighting, moving around or doing some unconnected work. This was not the case, however, in the classes in a private aided school where team teaching was employed by the teachers and in which a teacher was explaining or conversing with the entire class. In such classes, the children were not moving around or talking among themselves.

#### Combination of conventional and activity based approach.

There seems to be a transition in the district with respect to the methodology of teaching at the primary stage from the conventional teacher centred verbal approach to learner centred activity based approach. This transition, however, is not complete. If in schools where the activity based approach is implemented earnestly by the teachers, they are also found to use the conventional style followed in a teacher dominated classroom. This is partially because their perception of primary education has not changed much. The teachers and the parents think alike that the primary education must enable the learners to be able to read and write. This they consider as "serious teaching" as stated by one of the teachers. If it

is generally considered that the DPEP approach brings in a lighter teaching as felt by the Headmistress of a school and some parents. It is difficult to give up the so called serious teaching which is full of rote learning and repetitive work to be done by the students. In several classrooms the teachers seem to have compromised by combining the conventional and the activity based approaches.

#### **Team Teaching**

Team teaching is another approach, which was advocated after the starting of DPEP in Palakkad. This is done in large classes where the number of children and sections are more. The senior most teachers undertake the responsibility of leading the teaching. In the observed schools, the teacher followed a more conventional style of teaching with long explanations and repetitive work, three teachers were simultaneously present in the hall where three sections of standard IV were combined for learning mathematics. It was reported by the teachers that for teaching the sections are combined and others supported the senior teacher during individual work. The role of the team does not appear to be very clear except for supervision and guidance when all the three teachers are helping the students to complete the activity or solve problems. If at all the need for team teaching was felt by the teachers and the BRC trainers it was in teaching of mathematics, where a single teacher was unable to provide individual guidance and feedback.

#### **Supervision of Pupil Activity**

In a classroom, the learners undergo sequential learning experiences provided to them. In order to benefit from the experiences provided a learner needs feedback. The teacher's, role when the students are engaged in activities whether individual or group, is to supervise and guide the learners. Two most common ways of supervision and providing feedback followed in the primary classrooms of Palakkad seems to be moving around the class and sitting or standing in one place expecting the children to bring their work. Both these approaches have their limitations. In classes where the teacher is moving around, she is found to be doing it more mechanically and does not provide the time that is required for supervision and individual feedback. When the teacher is at one place and the students have to bring their work, all students are not found to show their work after completion to the teacher. In both these some children who are not learning but are in need of guidance get neglected. Those who can would learn and those who cannot would continue to lag behind in such classes.

#### Reinforcement

Knowledge of results of performance is essential for learning to occur. Children do look forward to receiving feedback and reinforcement in the course of their learning. It is observed that teachers usually resort to ticking the written work of the students. In some instances this was done so mechanically that even wrong answers of students were routinely ticked as correct. Also, the teacher uses verbal reinforcement such as correct, good. There seems to be a general tendency to suggest to the other students to emulate the work done by a student who has completed an assigned activity to motivate them. Competency based learning however should be devoid of a normative reference to another learner. The need to make the competency criterion as the reference for learning is yet to be practiced in the classrooms.

There were a few instances when teachers used token reinforces such as chocolates and chalk pieces. They declared to the students that the one who completes the task or the one who complete the task first would be given these reinforcers. However there was a general negligence of students who were not task oriented and were in need of a suitable reinforcement.

#### Reinforcement

Knowledge of results of performance is essential for learning to occur. Children do look forward to receive feedback and reinforcement in the course of their learning. Supervision by the teacher provides instances for reinforcing student learning. It is observed that teachers usually resort to ticking the written work of the students. In some instances this was done so mechanically that even wrong answers of students were routinely ticked as correct. Also, verbal reinforcement such as *correct*, *good* is used by the teacher. There seems to be a general tendency to suggest to the other students to emulate the work done by a student who has completed an assigned activity to motivate them. Competency based learning however should be devoid of a normative reference to another learner. The need to make the competency criterion as the reference for learning is yet to be practiced in the classrooms.

There were a few instances when teachers used token reinforces such as chocolates and chalk pieces. They declared to the students that the one who completes the task or the one who complete the task first would be given these reinforcers. However there was a general negligence of students who were not task oriented and were in need of a suitable reinforcement.

#### **Teaching Learning Material Used**

Instructional materials form an integral part of the activity based teaching. Material which are locally available are procured by the teachers. A teacher had brought tamarind seeds while teaching counting and another had brought a nest of a sparrow for teaching places of dwelling. Teachers also use specimen as teaching learning material in the classroom. Instructional materials are also prepared by the teachers in the form of cards and charts. They are used in the teaching of letters, words, etc. in teaching of Malayalam and in teaching the number concept, addition, subtraction, multiplication and division in mathematics and classification and comparison in EVS. Whereas the teachers use this instructional material suitably in the class, they seem to be governed more by the suggestions of trainers and the way an activity is described in the teachers handbook than the adaptations required to suit their own classroom situations. It is also found that instructional materials are generally understood as those, which are handled by children. They are of low cost and can be made easily by the teacher. However, there seems to be a reluctance to prepare teaching aids and the teachers expect that the BRCs will provide them with teaching materials. There seems to be a need to expand the meaning given to the instructional material and teaching aids if a variety of learning experiences are to be provided to the children.

Since the primary schools in the district use activities in teaching the children and since much of the activities are organised in small groups, the information from children and from activities constitute the main input of material in teaching and learning. This is only second to the use of black board. If teachers in the private schools used the black board on almost all occasions of teaching, those in the government schools did not use it in some classes.

The teacher talk was the next used material in teaching learning. Its use was maximum in the urban government school land was minimum in the urban aided school. Teacher talk was the most used material in the tribal school, followed by the use of black board and the text book in that order. This only shows the conventional nature of the teaching learning process in this school where the teacher plays a dominant role.

In a large number of classes in the private aided schools, the teacher used visual aids such as charts or cards and also they used objects and specimen. The most used objects in the classes were 'seeds' and 'broom sticks'.

Just as in the case of tribal school, the teachers in the government rural school also relied heavily on the textbook. On the contrary, there were no instances of the use of text book in the urban government school and the only instance when a book was used in the class was when a teacher used a story book.

#### **Textbooks**

To most of the children in the primary schools of Kerala the textbooks are provided by the state. The children belonging to disadvantaged groups such as Scheduled Castes, Scheduled Tribes and the Backward Classes are provided the textbooks free of cost. In another scheme, all girl children also get the textbooks free. This means that the boys belonging to the forward community are the only category of children who do not receive the textbooks from the state. Kerala has a system of distribution of the textbooks through the society. It was found during the course of the study that on no occasion did all children have textbooks with them. Mostly one or two copies were available for the entire class and there were instances when the teacher also did not have the textbook. It is not clear whether textbooks, if at all prepared by the state, serve any purpose in classroom teaching if it is not available.

The use of a textbook in the changed context of teaching seems to be not very clear to the teachers. The tendency of using the textbook for mechanical and rote learning of its content still persists in the classrooms. This is extensively found in those classrooms where the teacher is not competent in using the activity based approach or is not convinced about the desirability of using the approach. A teacher in the tribal school, for example, used the textbook extensively despite the fact that none of the children had a textbook with them on the day of the observation. Reading from the textbook, making students read from the textbook and asking questions based on the textual content was still prevalent as a reminiscence of the pre-DPEP classrooms.

Almost all teachers were concerned that the textbooks are not supplied properly. Schooling and use of textbook are so strongly associated that some children and the parents who were interviewed during this study were also expressing their displeasure about the non-availability of textbooks.

It was found during the course of this study that the teachers had encouraged children to develop story book and song book in some schools. This was a suggestion made to the teachers during their training. There were instances, though rare, when the children brought these books to the school and the teacher used them as instructional aid.

#### Joyfulness in Learning

A primary aim of the revised curriculum and the methodology of primary education under the DPEP is to make learning joyful. Learning through the earlier methodology was considered a drudgery and was full of uninteresting classroom work with its emphasis on rote learning. Children were hardly allowed to play and sing in the classroom unless it were a part of the textbook.

Under the DPEP, a child is to be provided with such content and approach that he/she is happy while undergoing leaning. Songs, activity, stories and games form essential experiences provided in the classroom. Songs and singing by the children in the primary classrooms have become a common sight. Generally, children are actively participating in singing and are also found to be enjoying it. Topics such as school, home, animals form their content. Elephant is a favourite topic of songs. One also finds number songs involving counting, addition and subtraction. The teachers, it seems, write most songs themselves.

The government school teachers made provision for singing in less than 20 percent of their classes where as the private aided school teachers used songs in more than 80 percent of their classes. An instance of extremely poor use of songs was found in the tribal school, where the teachers did not use songs in almost all of their classes. There were more instances when the government school teachers began their classes with a song than they ended it. Whereas, the private school teachers began as well as ended with songs on almost equal occasions. The government school teachers used singing only once in a class period whereas, the private school teachers used it on more than one occasion in a period. The teachers of private aided school located in the urban area used songs at the end of an activity. Not only that the government school teachers used song on much lesser occasions in a class period, the number of songs they used in a class were also less. In the private school, on the other hand, there were classes observed when the teacher used as many as seven songs in a class period.

#### **Ending of a Class Period**

At the end of a learning episode a teacher normally attempts to establish the learning by recapitulating/reviewing what has been learnt. At times, the teacher may assign some work for children for consolidation or as follow-up.

The lessons in the primary classes of Palakkad district ended most often with oral or written question-answer or in the midst class work. Another most common way of ending a lesson was while solving problems, particularly when the teacher was teaching mathematics.

Just as the lessons started abruptly on most occasions, the incidence of lessons ending abruptly was also high. If abrupt ending was very high in the government schools, it was high in other schools. It may be observed that, no clear pattern of ending a lesson was found in the remote tribal school. In the private aided schools, many classes were found to end with singing of a song. If the ending with songs was less in the rural government school, it was totally absent in the urban government school and the tribal school. Many classes in the rural schools, both private and government, ended with class work or with assigning home work to the children. Very few instances were found when the classes ended with drilling of a learnt material.

The incidence of abrupt stopping was more in the Malayalam classes of the government schools and the mathematics classes of the private schools. In the private schools, the Malayalam classes ended more often with oral or written question-answer and the incidence of such an ending was high in the government rural school as well.

#### **Evaluation**

The process of evaluation advocated by the DPEP is one of continuous and comprehensive evaluation. The earlier system of awarding marks is replaced by a grading system. Criteria for evaluation are fixed for different classes. The criteria for evaluation at standards I and II, for example, are: Speaking, Reading, Writing, Creative Expression – oral, Number Concept – I, Number Concept – II, Addition, Subtraction, Measurement, Problem Solving, Observation, Comparison, Classification, and My Environment Book

It can be seen that these items of evaluation are at best areas for the development of competence. They are not specific enough for an objective testing. The DPEP in Kerala has kept the items of evaluation as areas of competency rather than items of competence which, incidentally, are found in the document of the Government of India on Minimum Levels of Learning. It was not very clear from the teachers or the trainers as to why the items of evaluation should not be specific.

This ambiguity in interpreting what should be the level of attainment for speaking, reading, writing or creative expression is found to have created a considerable amount of confusion among the teachers, children, parents and community. The general view held that "DPEP is singing and dancing and not learning", probably stems from the vagueness in specifying the learning outcomes. One must remember that this system of evaluation replaces an earlier system, which was specific in its evaluation though not acceptable. Not only that a

child could undertake self-study, or a parent provided tutorial help; the teachers organised it meticulously. This however led to a tradition of 'rote learning', which came to be viewed synonymously with primary schooling.

The frequency at which evaluation is undertaken is also important since it reflects the extent to which a child has approximated the goals. It is found that continuity in evaluation is advocated by the DPEP in its training. However, there is hardly any continuous evaluation practiced at the school level. Instructional experiences are provided as packaged activities with very little or no attention being given to evaluation. Questions asked by the teacher, the activities undertaken by the children are viewed to be different from evaluation. Hence, evaluation hardly is diagnostic. In the absence of an emphasis on learning by all and need for remediation, evaluation is organised predominantly for its summative purposes. Every teacher is provided with evaluation sheets in which she has to maintain a record of the performance of every child on the stated areas thrice in a year.

The system of grading student learning is advocated by the trainers and is practiced at the school level. The strength of the earlier system of evaluation was its ability to demonstrate objectively the extent to which a child had learnt. Even though, the present approach could also demonstrate learning, what is demonstrated is not viewed by the parents in general and by the teachers to a certain extent as learning that should happen through a specially contrived process called schooling. That is the reason why the DPEP in Kerala has taken steps to orient the teachers and the parents about its philosophy of evaluation. It was reported that xeroxed copies of detailed guidelines for conducting the evaluation were supplied by the DPEP personnel to the teachers. It was noticed through the present study, though, that the efforts made have not resulted in a general acceptance of the system. There are genuine questions raised, doubts expressed about its scientific nature, objectivity and appropriateness of the process and the practice of evaluation at the primary level. The fact that the English medium private schools still follow a system of awarding marks adds to the confusion existing.

Evaluation, like methodology of teaching, is also undertaken by way of activities. The difficulty, however, is of organising it in a large class. There seems to be a general practice that evaluation must happen on an announced date and should be completed within a stipulated time such as one working day. The private aided school in the rural area was an exception to this since the evaluation in this school was done competency wise and it extended beyond a school day.

Another problem that has started worrying the DPEP personnel, the teachers and the parents alike is the relative position of the child evaluated on a grading system with the one who is evaluated on the marking system. When the child on a grading system seeks admission at a later date in an institution which follows the marking system, and if the seats are limited, what are his/her chances of being accepted and admitted. When there are two forms of evaluation simultaneously practiced, comparisons are inevitable. Mechanisms of converting grade positions into marks are not worked out. Apprehensions about the children evaluated on a grading system in Kerala becoming non-acceptable in a different state where the system followed is of marks has started surfacing. Questing such as "are all states practicing the grading system?" are heard more often in the discussions on evaluation.

It was found that the teachers generally follow the following criteria for grading the student performance during evaluation.

Grade A - A child who performs without any support from the teacher

Grade B - A child who performs with very little support from the teacher

Grade C - A child who requires more support for performance

Grade D - A child who is unable to perform

There were instances when the teachers, instead using the grading system directly, regressed to the earlier method of allotting marks and they converted the marks in to grades subsequently.

#### **Equality of Opportunity to Learn**

The children attending primary schools come from different socio-economic background. The efforts at the school must be towards minimizing the inequality feeling among certain sections of the population of children who are otherwise discriminated against.

Gender discrimination is a predominant cultural practice. Teachers, administrators and the community who form the adult influences on the growing children need to guard themselves against practices which make children conscious of their belongingness to a particular gender category. The following gender discriminatory practices were observed in the primary schools of Palakkad district.

1. Separate seating arrangements for boys and girls - All schools

2. Formation of Groups in the Classroom separately forboys and girls during activity- All schools

3. Teacher utterances that make children conscious of their gender belongingness - Most teachers

5. Providing greater opportunity for one group over theOther- Many teachers

5. Group leaders from one category only - Some teachers

The categories 3, 4 and 5 predominantly refer to the teacher attitude and bias. Instances of teachers telling "the girls will not be able to answer to this question because they don't play football", "see the boys have completed the work, you also should hurry up", "why the girls are silent? I will ask some questions to you now" are statements that reflect such happenings in classroom which could be avoided.

Another discriminatory practice in the classroom stems from the legacy of caste and community system in India. The children belonging to forward community or economically sound families are likely to be attended to better than those who came either from disadvantaged families/communities and economically backward groups.

The following instances of discrimination leading to inequality in opportunity to learn were found in the primary classrooms of Palakkad district.

- 7. Children belonging to disadvantaged groups/communities were found to be seated separately in the classroom.
- 8. The teacher shows an implicit preference for children belonging to forward community/groups throughout the lesson starting from the formation of groups for activities, selection of leaders, supervising and providing assistance during learning.
- 9. Disproportionate expression of pleasure and praise towards the work done in reading, writing, oral participation etc. by the children belonging to well to do families/advantaged groups.
- 10. Expression by a large number of teachers during interview that, *certain categories* of children (belonging to disadvantaged groups) do not/cannot learn.
- 11. Expression by teachers in interview that they find it difficult to cope with the learning needs of children belonging to a certain category.
- 12. Emphasis by the teachers that "the parents of these children don't provide any help", "these parents don't come when we call them", "if the mid-day meals were not given, they may not come to the school at all" etc. reflecting that certain category of children do not have any motivation/home background for learning.

#### **Incentives for Children**

In the state of Kerala, and hence in the district of Palakkad, the government has introduced a *Mid Day Meal* scheme for the children. The scheme was extended to all primary schools in Kerala in the year 1987. The government gives at the rate of 20 paise per student per day to a school with a student strength up to 100. For schools with higher strength, the rate is 10 paise per student per day. The school requires, on an average, Rs.800 to Rs.900 to prepare the meal. Rupees 20 –25 per day is paid to the cook. The Parent Teacher Association helps the school in meeting this expenditure. Each parent pays Rs.5-10 and some who can afford pay even more. The rice and gram are given to the school through the fair price shop and it is the responsibility of the H.M. to collect the same. The procedure to be followed for collecting the items is fairly tedious and the HMs in more than one school have expressed their displeasure in doing this task. The funds are released through the AEO of the range and there are instances when the schools have not received the funds in time.

In the urban government managed school, the Health and Nutrition Department of the Town Municipality provides *all children* with milk/bread/plantain/boiled rice in the afternoon.

The children in the tribal school are given a cash stipend by the government of Rs.75 per month. Of this amount Rs.5 per student is collected by the school to pay to the cook who prepares the mid day meal.

The government also has provision of distributing free text books to children. It was mentioned by the teachers that all girls, all SC, ST and OBC children are the beneficiaries of this scheme. It seems that the boys of the forward communities are the only category of children who are deprived of this facility. However, there were complaints about the delay in receiving the books by all schools and the children were found to undergo their education without literally having any text books. It was found, in the course of this study, that the teachers have adopted a via media of writing the lessons from the text book on large sheets of card paper and they hang them in front of the children when they used the text book.

### Section II. The Antecedents

### **Training Received by the Teachers**

Since the inception of the programme the district has witnessed several training programmes and the sequences of training provided to the teachers have been as follows:

- Five day initial training on pedagogy and activity based curriculum (ABC) approach
- Three- day training, separately for classes I and II and for III and IV on language approach, integrated approach, projects, etc.
- Cluster meetings of one day per month for review and planning
- Three day training on approach to evaluation and grading indicators
- Kingnikootam training-I of 5-day duration for capacity building
- Kingnikootam training –II of 5-day duration in summer vacation followed by 7-day field experience
- Evaluation training for developing evaluation tools of 1-day duration

The year 1997-98 witnessed the introduction of a variety of inputs for making the classroom process "activity based and experiential for facilitating learning by children. The Kingnikootam training is currently being implemented in the district and has been designed on the observations made by the internal academic support mission held in the month of March 1998. The Kingnikootam training is designed to address the issues of classroom learning processes and teacher competencies to handle the multi level and multigrade issues, develop and try out strategies for managing poor learning in multi level learning context and try out new teaching strategies like team teaching. The expected outcomes of this training input are to enable teachers:

- 1. To develop clear work strategies to make the classroom process activity based and child centred.
- 2. Design and try out strategies, activities and management techniques for addressing the issue of multi level situation in the classroom.
- 3. Support professionally in applying their understanding about the children and the learning in classroom situations.

These training given were aimed at developing awareness about the inadequacy of the existing system and practices of primary education, a vision of the goals of primary education, an understanding of the methodology suitable for achieving the goals and of assessing its achievement.

#### The Teachers

The teachers including the headmistress were asked what in their view was the aim of primary education. Pupil's discipline and development of good behaviour in them seems to be the most agreed upon goals of primary education among the teachers. Their perceptions about the need for discipline, what they mean by discipline are similar whereas some differences on the methods/approaches to achieve these goals exist.

The teachers were asked about their reactions to the methodology advocated by the DPEP, the training support they received and their competence to follow the methodology in the classroom. This must be viewed in the background that the primary classrooms are yet not out of the structured, textbook oriented instruction and that many teachers implement the activity based approach rather as package without necessarily having an ability to modify/enlarge the activities such that all children in the class attain the desired outcomes.

There seems to be a general acceptance that the method is useful in that it makes the children participative. However, a large number of teachers interviewed were also of the opinion that the method by itself is not sufficient, that it hardly helps in ensuring discipline among children and that it is too demanding.

There is a dissatisfaction regarding the support received by the teachers from the BRC trainers. This is particularly more among the upper primary school teachers. Even though they are not required to use the methodology, they seem to have developed an opinion. It could also be due to the fact that they too could have become BRC trainers if selected. The teachers are having several reasons regarding their dissatisfaction. A few main reasons expressed are as follows:

- The trainers are not able to demonstrate sufficiently
- The trainers adopt advising
- The trainers supervise and tend to criticize the teachers
- The trainers come to find fault

The upper primary school teachers interviewed were very critical of the DPEP as a project and of the training support provided. Their reaction to the methodology is not a studied one because none of them are trained in it. It may be necessary to note that while bringing about a change in a school efforts must be to include all the functionaries so that there is no discordant note or demotivating influence on those teachers who practice the method.

The community too seems to have an adverse opinion about the DPEP in general. They seem to find an effort to deprive certain sections of the community through this project because many children from the well to do family are not required to undergo this programme since they are enrolled in the English medium private schools which do not follow the DPEP curriculum or method. According to a teacher, the community views with suspicion the DPEP and feels that there is a differentiation to split the community among rich and poor. Some feel that it is not for the states like Kerala.

# **Implications**

On the basis of the observations made in this study, the following implications have been drawn.

- Efforts to be made to ensure that the schools function to a full day, in the case of government schools.
- A suitable approach to dealing with the combined classes be worked out.
- Steps to be taken to improve the punctuality and attendance of teachers, especially in the case of remote schools located in the tribal area.
- Undertaking enrollment drive in the tribal area.
- Ensuring quality instruction in the tribal schools through appropriate training.
- Ensuring the availability of textbooks to children.
- Making provision for and ensuring inputs in non-cognitive areas of the curriculum.
- Suitable training to be provided to the head teachers clarifying their role in teaching and administration.
- Provision for time for planning, especially collective planning in schools with more than one section in each standard.
- Suitable training to the teachers to clarify their understanding of instructional time, instructional inputs, approaches to instruction such as activity based teaching, team

teaching and experiential learning, teaching learning material, supervision, remediation and evaluation.

- Steps to be taken to demonstrate the advantages of the changes brought about in the school to the community members and parents.
- Sensitisation of teachers to the issues of equality and gender discrimination in classroom.
- A thorough analysis of the curricular statements with a view to specify them further and evolve objective and comprehensive ways of evaluating their achievement.
- Organising workshops to evolve a variety of activities and to develop instructional material including teaching learning material.
- To reorient teachers on appropriate and effective use of songs, stories and games in classroom.
- Providing incentives such as recognition to innovative teachers who have designed imaginative activities and have composed songs and stories for children.
- Steps for establishing a professional symbiotic relationship between trainers and teachers.
- Ensure uniformity of curriculum across schools, Malayalam and English medium.

\*\*\*\*\*\*\*\*\*\*

Table 19: Loss of Instructional Time in a Day

	Tot	16	9	0	18	2	0	2	0	0	4	0	0	2	0	0	74	.39
	IV	3	1	ı	7	ı	ı			ı	2	ı	ı	ı	ı	ı	16	.33
VLPS	Ш	3	1	ı	7	ı	1	-	1	1	2	1	1	ı	ı	ı	16	.33
	П	5	2	1	2	1	-	1	-	1	1	1	1	1	1	1	21	44.
	Ι	5	2	ı	2	1	ı	1	ı	ı	1	1	ı	1	ı	ı	21	44.
	Tot	0	0	0	0	0	0	ı	0	0		0	0	0	0	0	1	.01
LPS	IV	1	-	1	1	1	1	•	-	-	1	1	-	1	1	1	0	00.
AKMMLPS	Ш	,	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.02
A	П	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	00.
	I	1	1	ı	1	ı	1	1	1	1	1	ı	1	1	ı	1	0	00.
	Tot	13	0	0	4	0	0	8	0	0	9	Т	1	2	0	0	45	.23
Sc	IV	3	-	ı	2	ı	1	2	•	1	1	1	1	1	1	1	7	.15
VGLPS	H	5	1	ı	2	ı	1	2	1	1	4	1	1	1	1	1	17	.35
	П	2	1	ı	1	ı	1	2	1	1	1	ı	1	1	1	1	5	.10
	I	3	-	ı	1	ı	1	2	•	1	1	1	1	2	1	1	16	.33
	Tot	1	0	0	0	0	0	0	0	0	4	0	0	1	0	0	9	.03
S	IV	1	1	ı	1	ı	1	1	1	1	1	ı	1	1	1	1	1	.02
KUPS	Ш	1	-	1	1	1	1	1	1	1	1	1	1	1	1	1	1	.02
	П	1	-	1	-	1	-	-	-	-	1	1	-	1	1	1	0	00.
	I	Т	1	1	1	1	1	1	1	1	2	1	1	Τ	ı	1	4	80.
	Tot	0	6	0	4	0	0	9	0	0	7	0	1	1	0	0	62	.32
Sd	IV	1	2	1	1	1	1	1	1	1	3	1	1	1	1	1	20	.42
GMLPS	III	1	2	1	1	1	1	2	1	1	-	1	1	1	ı	1	12	.25
	П	1	2	1	1	1	1	2	1	1	2	1	1	1	1	1	13	.27
	Ι	1	3	1	1	1	1	2	1	1		1	1	1	1	1	17	.35
		Periods	Sessions	Days	Periods	Sessions	Days	Periods	Sessions	Days	Periods	Sessions	Days	Periods	Sessions	Days		
REASON		1. School not started/school closed/	no teacher and no work			2. Teacher present but no work			3. Play – unmonitored			4. Engagement activity (mechanical)			5. Unplanned activity		Total (in class periods)	Average loss in a day

Table 20: Loss of Instructional Time within a Class Period (in min)

Reason		3	<b>GMLPS</b>					KUPS					<b>VGLPS</b>				AK	AKMMLPS	S				VLPS		
	Ι	П	II III II	IV	Tot	I	П	Ш	VI	Tot	I	П	Ш	IV	Tot	I	II		ΔI	Tot	ı	П		IV IV	Tot
No teacher and no work	52.5	1	1	1	52.5	15	1	1	1	15	50	25	50	25	150	12. 5	37. 5	1	25	75	12.	12. 5	1	1	25
Teacher present but no work	32.5	09	1	20	112.5	20	1	7.5	22.5	50	32.5	57.5	52.5	32.5	175	7.5	22. , 5	7.5	1 (2)	37.5	12.	12.	1	1	25
Play/Activity - Unmonitored	7.5	ı	1	ı	7.5	1	ı	ı	1	0	1	25	35	35	95	12. 5	45	7.5	57. 1 5	122. 5	ı	1	ı	1	0
Engagement Activity (mechanical including singing)	45	50	1	25	120		27.5	32. 5	27.5	150	22.5	45	45	70	182. 5	1	15	1	ı	15	25	25 6	62.5 6	62.5	175
Unplanned Activity	25	15	-	-	40	7.5	-	-	-	7.5	-	25	-	376.5	62.5	-	-	-	-	0	-	-	-	-	0
Total	162.5	125	0	45	332.5	105	27.5	40	20	222. 5	105	5.	182.5	200	999	32. 5	120	15 8	5.	250	50	9 09	62.5 6	62.5 2	225
Total loss during the period of observation	.43	.33	.25	44.	.36	.13	.01	.04	.04	90.	.38	.19	.44	.24	.31	.01	.06	. 03	.04	.03	.46	. 46	.35	.35	.411

Table 21: Ways in which the Learning Episode Begins

		GM	GMLPS				KUPS				<b>VGLPS</b>	Sd'			AKMMLPS	LPS			VLPS	S	
	Ma	Ma Math EVS Tot Mal Math EVS	EVS	Tot	Mal	Math	EVS	Others/	Tot	Mal	Math	EVS	Tot	Mal Math EVS	Math	EVS	Tot	Mal Math	Math	EVS	Tot
	-							WE/AE/ HPE													
1. Abruptly	11	5	3	18	7	4	-	-	13	10	7	2	19	11	4	ı	15	5	0	0	5
2. Through informal questions	1		1	1	1	1	1	ı	3	9	1	ı	9	8	1	1	10	3	0	3	9
3. Providing context/ with introductory remarks	2	1	1	3	1	1	1	1	1	2	1	1	3	1	1	1	3	0	0	0	0
4. Follow-up of an assignment/ recapitulation/drilling/reading/ dictation/classwork	1	1	ı	1	9	3	1	1	6	2	4	1	7	<b>%</b>	3	1	11	4	0	0	4
5. With guessing game or activity	12	4	2	18	9	4	ı	1	11	9	4	1	10	11	4	1	16	0	0	0	0
Total observations	13	2	3	21	14	6	2	3	28	12	8	2	22	16	8	2	<b>5</b> 6	9	0	3	6

Table 23: What Children do during Individual Work

		GMLPS	Sď				KUPS				<b>VGLPS</b>	Sd			AKMMLPS	CPS			VLPS	S	
	Mal	Mal Math EVS		Tot	Mal Math	Math	EVS	WE	Tot	Mal	Math	EVS	Tot	Mal ]	Math   I	EVS	Tot	Mal	Math	EVS	Tot
1. Doing the intended work	12	4	3	19	15	12	2	2	31	12	7	2	21	15	7	_	23	3	1	-	4
2. Copying from other child	1	0	0	1	0	2	0	0	2	0	2	0	2	9	3	0	6	0	1	0	1
3. Talking among themselves	10	4	2	16	4	3	1	0	8	12	8	2	22	7	4	0	11	1	0	0	1
4. Fighting with another	5	3	0	8	2	3	1	0	9	3	2	1	9	1	0	0	1	0	0	0	0
5. Doing an unconnected work	8	3	2	13	2	2	0	0	4	8	9	2	16	4	3	0	7	1	1	1	3
6. Doing another task	9	0	0	9	0	1	0	0	1	2	1	0	3	0	0	0	0	0	0	0	0
7. Moving around in the class	5	1	1	7	1	2	1	0	4	4	9	0	10	2	2	0	4	0	0	0	0
8. Sitting quietly	4	5	0	6	2	2	0	0	4	12	8	2	22	11	2	1	14	4	1	2	7
Total episodes	13	5	3	21	15	12	2	2	31	12	8	2	22	16	7	1	24	4	1	2	7

Table 25: What children do when the teacher is explaining - classwise

			GMLPS	70				KUPS					<b>VGLPS</b>				AK	AKMMLPS	S				VLPS		
	Ι	II	Ш	ΛI	Tot	I	Π	Ш	IV	Tot	I	Π	Ш	IV	Tot	Ι	П	Ш	IV	Tot	Ι	П	Ш	IV	Tot
Listening to the teacher	3	5	4	2	17	9	8	5	9	25	4	5	5	7	21	9	11	3	5	25	4	4	5	5	18
Responding to the teacher	3	5	3	5	16	9	6	2	7	22	4	5	9	7	22	9	11	4	5	56	1	1	2	5	12
Talking among themselves	4	5	2	7	15	0	0	1	2	60	4	5	5	9	20	0	1	2	1	04	0	0	0	0	0
Writing something	1	0	0	0	1	0	1	0	1	02	1	1	3	1	90	0	0	0	0	0	0	0	0	0	0
Doing an unconnected work	3	2	1	5	11	1	0	1	1	60	4	5	4	3	16	0	3	2	1	90	0	0	1	1	02
Fighting	3	0	0	$\varepsilon$	9	2	0	2	1	90	1	2	0	2	05	0	0	0	0	0	0	0	0	0	0
Moving around	4	1	1	1	7	1	0	0	1	02	3	3	1	3	10	1	1	1	0	03	0	0	0	0	0
Sitting/standing quietly without involvement	3	5	1	4	13	3	0	1	1	05	4	5	9	5	20	2	7	3	2	14	5	5	5	5	20
Number of episodes observed					20					22					22					25					10
		1 4.4.1				,																			

(Note: In VLPS classes I and II, and III and IV were always combined)

Table 26: What Children do When the Teacher is Explaining - Subjectwise

Listening to teacher         Mal         Math           Responding to teacher         10         4           Talking         10         3           Writing something         1         0	<b>GMLPS</b>			K	KUPS			VGLPS	Sď			<b>AKMIMLPS</b>	ILPS			VLPS	S	
g to teacher         10           ing to teacher         10           10         10           something         1	ath EVS	/S Tot	ot Mal	Math	EVS	Tot	Mal	Math	EVS	Tot	Mal	Math	EVS	Tot	Mal	Math	EVS	Tot
ing to teacher 10 10 something 1	6,	1,1	7 12	8	2	22	14	5	2	21	15	6	-	25	10	2	9	18
Talking 10 3 Writing something 1 0	1 2		12	8	2	22	14	9	2	22	15	6	1	25	9	0	9	12
Writing something 1 ()	3 2	15	5 2	3	1	90	13	5	2	20	2	2	0	04	0	0	0	00
0	0	01	1	1	0	02	5	1	0	90	0	0	0	00	0	0	0	00
Unconnected work 8 2	2	1	1 2	1	0	03	6	5	2	16	2	4	0	90	0	0	2	02
Fighting 4 2	) 7	90 (	5 2	2	1	05	2	3	1	60	0	0	0	00	0	0	0	00
Moving around 5 1	1	. 07	7 1	0	1	02	9	4	0	10	1	2	0	03	0	0	0	00
Sitting/standing quietly 9 3	3 1	14	1 2	2	1	05	12	9	2	20	10	4	0	14	10	4	9	20
Number of episodes observed 12 05	5 03	3 20	) 12	8	2	22	14	9	2	22	15	6	1	25	5	2	3	10

Table 27: Use of Activity in Classroom

Nature of Use		9	<b>GMLPS</b>					KUPS				Λ	<b>VGLPS</b>				AKM	<b>AKMMLPS</b>				N.	VLPS		
	I	II	Ш	IV	Tot	I II III IV Tot Tot Tot Tot Tot	П	Ш	IV		ПП	Π	III	ΔI	III IV Tot III III II IV Tot III	I	П	П	T A	Cot	I	Π		III IV Tot	ot
Class periods with activity	4	5	4	4	4 17	7	5	9	7	25	5	7	8	7	27	5	7	5	5 2	22	0	0	0	0	0
Class periods with game	0	1	2	2	5	2	4	2	0	8	0	0	0	0	0	1	0	0	1	2	0	0 0 0	0	0	0
Range of activities in a class period	1-5	1-4	1-2	1-3	1-5	1-5   1-4   1-2   1-3   1-5   1-5   1-3   1-3   1-5   1-5	1-3	1-3	1-3		2-5 2-4	2-4	1-2	1-3	1-2 1-3 1-5 1-3 1-3 1-3 2-3 1-3	-3	-3	-3 2	3	i-3	0	0	0	0	0
Average number of activities in a 2.75 2.80 class	2.75	2.80		2.00	2.33	2.00 2.33 2.6 2.4 1.83 2.29 2.28	2.4	1.83	2.29		3.75	2.50	78 2	2.00	3.75 2.50 1.78 2.00 2.51 2.33 1.86 2.20 2.40 2.20 0 0 0 0 0 0 0 0 0	33 1	.86 2	20 2.	.40 2.	.20	0	0	0	0	0
Average number of games in a class	0	1	1	1	1.0	1 1 1 1.0 1.67 1.0 1.0 0 1.25	1.0	1.0	0		1	0	0	) 0	1 0 0 0 0 0.25 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0	0	0	0	0	0	0	0	0 0	0
Total class periods observed	2	9	5	9	22	5 6 5 6 22 11 5 5 5 26	5	5	5		5	9	6	7	5 6 9 7 27 5 9 6 6 26 2 2 2 4 3s	5	6	9	6 2	97	2	2	4	3s 11	1

Table 29: Use of Teaching Learning Material

		<b>GMLPS</b>	Sď				KUPS				<b>VGLPS</b>	Sc			<b>AKMMLPS</b>	Sď			<b>VLPS</b>	<b>S</b>	
	Mal	Math EVS	EVS	Tot	Mal	Mal Math EVS		WE/ AE	Tot	Mal	Math	EVS	Tot	Mal I	Math E	EVS	Tot	Mal	Math	EVS	Tot
1. Text book	1	0	0	1	3	0	1	0	4	7	2	0	6	2	0	0	2	4	1	0	5
2. Teacher talk	7	2	3	12	3	2	0	0	5	2	3	2	7	∞	2	1	11	9	1	1	8
3. Chart/Card/Map	3	0	0	3	3	4	2	1	10	3	1	0	4	4	1	1	9	0	0	0	0
4. Objects/Specimen	0	2	0	2	0	4	1	1	9	1	1	1	3	2	1	0	3	0	0	0	0
5. Information from children/activity	12	3	3	18	8	7	0	2	17	10	2	1	13	10	3	1	14	0	1	0	1
6. Blackboard	6	3	2	14	10	6	2	1	22	10	9	2	18	14	9	1	21	5	1	1	7
Number of periods	14	4	3	21	10	6	2	2	23	12	8	2	22	16	9	1	23	9	2	1	6

Table 30: Use of Songs in Classroom

Nature of Use			<b>GMLPS</b>	S				KUPS					<b>VGLPS</b>	S			Al	AKMMLPS	Sd'				<b>VLPS</b>	Š	
	I	Π	VI III	IV	Tot	Ι	Π	Ш	IV	Tot	Ι	П	Ш	IV	Tot	Ι	П	Ш	IV	Tot	шпп	П		IV	Tot
Class periods without song	5	5	5	4	86.4%	0	0	0	1	03.2%	3	9	9	9	77.8%	2	4	2	1	34.6%	2	2	3	3 9	%6.06
Class periods with song	1	1	0	1	13.6%	11	5	5	4	96.2%	2	1	2	1	22.2%	3	5	4	5 (	65.4%	0	0	1	0	9.1%
Class periods beginning with song	1	0	0	1	9.1%	7	2	2	0	42.3%	2	0	0	1	11.1%	2	2	2	3	34.6%	0	0	0	0	0
Class periods ending with song	0	1	0	0	4.5%	4	3	1	3	42.3%	1	0	1	0	7.4%	0	4	2	2	30.8%	0	0	0	0	0
Song after an activity	0	0	0	0	0	9	3	3	2	53.8%	2	1	1	0	14.8%	1	0	1	2	15.4%	0	0	0	0	0
Number of occasions of singing in a period	0	1	0	П	0-1	1-4	1-4	1	1-2	1-4	2-3	1	П			1-2	1-2	2-3	1-3	1-3	0	0	0	0	0
Range of songs in a class period	1	1	0	1	0-1	1-7	1-5	1-4	1-3	1-7	5-6	1	1-2	1	1-6	1-4 1-5		2-6	1-4	1-6	0	0	1	0	0-1
Average number of songs in a class period	1	1	0	1	1.0	2.87 2.40 2.33	2.40	2.33	1.60	2.40	4.0	1.0	1.5	-	2.16	2.0	2.2	4.0	2.33	2.63	0	0	1	0	0.25
Number of class periods observed	5	9	5	9	22	11	5	5	5	56	5	9	6	7	27	5	6	9	9	26	2	7	4	3	19

Table 31: Ways in which the Learning Episode Ends

		<b>GMLPS</b>	Sd				KUPS				<b>VGLPS</b>	PS			<b>AKMIMLPS</b>	ILPS			VLPS	Sc	
	Mal	Math	EVS	Tot	Mal	Math	Mal   Math   EVS   Tot   Mal   Math   EVS   WE/     AE	WE/ AE	Tot	Mal	Math	EVS	Tot	Mal	Math	EVS	Tot	Mal	Math	EVS	Tot
1. Through drill	1	,	ι		1	2	0	0	3	0	2	0	2	0	0	0	0	2	0	0	2
2. Question-Answer/Writing	9	2	1	6	7	5	1	0	13	11	3	1	15	10	4	_	15	2	0	1	3
3. Classwork/giving home assignment	3	2	1	5	1	3	1	0	5	3	5	1	6	7	3	1	11	1	0	2	3
4. Abrupt stop (bell or other reason)	13	3	3	19	3	3	0	3	6	7	5	0	12	3	4	0	7	3	0	0	3
5. Singing a song	1	ı	1	ı	7	3	ı	0	10	3	0	0	3	4	2	0	9	0	0	0	0
Total observations	13	5	3	21	14	6	2	2	27	13	14	2	56	16	8	1	25	7	0	3	10