

ACTION RESEARCH ON UNIVERSAL PRIMARY EDUCATION -  
AN INDIAN INSTITUTE OF EDUCATION (POONA) PROJECT

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The National Perspective

In India, national leaders demanded enforcement of compulsory primary education as far back as 1881, drawing their inspiration from the fact of Britain's having done so in 1870. However, it was only after independence that universalisation of primary education was included in policies for national reconstruction. Article 45 of the Directive Principles of the Indian Constitution required universal primary education for the age group 6-14, by the year 1960. But the changing priorities of national concerns from one Five-Year Plan to another made it impossible for primary education to get its constitutionally directed high priority.

The Indian Education Commission (1964-66) took up the issue afresh and strongly argued the case for universal primary education in relation to development. Subsequently, the Central Advisory Board of Education debated the problem. While recognising such hurdles as rural poverty, socio-cultural constraints and population increases, it nevertheless recommended rapid universalisation of primary education. Part-time non-formal primary education was accepted as a support programme and "full-time primary education if possible and part-time education, if necessary", became the watchword for achieving universalisation.

A review of education when preparing India's Sixth Five-Year Plan shows that formal primary education facilities have substantially increased and primary schools are available to 95 per cent of the population within the walking distance of the 6-11 age group. Nearly 85 per cent of children in this age group are on the rolls in classes I-IV (or V in some States). But it also revealed that of the children enrolled in class I, only about one-third reach class V, in spite of the availability of schooling facilities. Besides, the enrolment in class I contains a large proportion of under-age and over-age pupils who tend to drop out early. Enrolment figures are usually found to be inflated, for the class size determines the appointment and continuance of teachers. And working back, it is seen that the figures are overestimated. Nearly 60 per cent of children of school-going age are from the poor and disadvantaged class, and girls particularly stay out of school. The reasons for dropping out are poverty, social custom and unattractive and irrelevant instruction. From age seven onwards, poor children are busy the whole day long assisting their parents in agriculture and other rural tasks or are required to earn a living for themselves. Girls have to do household work and take care of children, when women go out to work as labourers. These

circumstances make non-formal part-time education a worthwhile solution to the problem besetting universalisation. It is also generally conceded that while developing a non-formal channel of primary education, the formal primary school would have to be helped to function better. The two should be mutually supportive devices in the interests of universalisation of primary education.

In most States, part-time primary classes for the 6-11 and 9-14 age groups have been started under advice from the Ministry of Education of the Government of India. These are conducted either in the afternoon or in the evening by a professional primary teacher drawn from the local full-time primary school. He is paid an honorarium of Rs. 50 per month. The class size is thirty pupils. The pattern of working days, vacations and holidays is, by and large, the same as that of the full-time school. The primary curriculum of four years is expected to be condensed into two years. Generally, the curriculum, textbooks and the teaching methods used for the part-time classes are not very different from those in a full-time school. However, the need for research and experimentation in non-formal primary education has been recognised as there are no precedents for planning and organising such a programme on a large scale.

#### The Institute and its Projects

The action research project on universal primary education has been launched by the Indian Institute of Education of which R.V. Parulekar and J.P. Naik, both firm believers in mass education, were the founders. The present action research project was conceived by J.P. Naik in 1978 as a major research project of the Institute affiliated to Poona and Bombay Universities for postgraduate teaching and research in education, with an interdisciplinary approach. Developing non-formal education rather than intervening directly in the formal system is part of the Institute's policy. Yet, improving the performance of the formal system at all levels, so as to render it more responsive to the needs of the disadvantaged sections of society, is also within the scope of its concerns. It is against this background that the Institute has undertaken a five year action research project on universal primary education (1979-83), in five selected rural areas of the Poona District (Maharashtra). Finding ways of stimulating and training rural communities to develop comprehensive local education plans is the ultimate aim of this experiment. Non-formal education for the age group 9-14 is the first step towards the main goal. It would cover, along with non-formal primary education, (a) improving the formal primary schools in the project area, (b) education for better health and environment, (c) application of science to everyday life, (d) adult literacy and continuation education, and (e) education for rural development, in general.

The action research project started in 1979 may run a year or so beyond its specified time limit and would be completed in 1984, when its final comprehensive report will be prepared.

## Objectives

The objectives of the project are :

- (a) to strive to provide universal primary education for children in the age group 6-14 in selected rural areas of the Poona district, Maharashtra State;
- (b) to strive to improve the quality of education in the primary schools in selected areas and to relate it more closely to the life and needs of the rural children and to rural development;
- (c) to conduct experiments in urban slums with a view to evolving a similar programme for universalisation of primary education, to improve its quality and to make it more relevant to the life and needs of the slum children (this was explored in 1979 but postponed so as to be able to concentrate on the rural programme);
- (d) to produce improved educational materials for primary education in the rural areas and in urban slums;
- (e) to devise techniques and to produce related materials for the effective training of teachers of part-time and full-time primary schools; and
- (f) to devise more effective techniques of supervision.

## The Project Area and Organisation

The project decided to focus on five selected rural areas in Poona district, representing five different types of agro-climatic conditions, in all having a population of about 125,000 spread over roughly 100 villages and 80 habitations. The area types selected were drought prone; hilly with heavy rainfall; hilly and semi-tribal; fairly well-irrigated but not advanced; and well irrigated and semi-industrial.

It is assumed that the occupational patterns of the poor families and non-attending children in these areas would vary to some extent and must be taken into account to formulate area-wide plans for the universalisation of primary education. A main centre of operation has been selected in each area, where a team of one research officer and two project assistants is stationed. These are: Pabal, Panshet, Shinoli, Khed Shivapur and Katewadi - all beyond the suburban belt of Poona city, the nearest being 25 kilometres and the farthest being about 100 kilometres. A base-line survey conducted in early 1979 showed that the selected areas had 185 multi-teacher primary schools and 97 single teacher schools. The number of enrolled pupils (6-14 age group) was 19,635 and that of non-school going children of the same age group was estimated at 19,374. A household survey was conducted to investigate the economic and educational status of the families of out-of-school children and to prepare lists of illiterate children in the 9-14 age

group for enrolment in part-time classes. A survey of primary schools was also conducted in order to obtain a profile of the teachers and the conditions in Standard I, with a view to (a) organising teacher orientation for making the full-time school more effective and (b) reducing drop-outs from Standard I. This programme was planned to follow some experiences of conducting part-time classes and will begin towards the middle of 1982.

### Organisation of Part-Time Classes

The survey showed that 7 to 10 p.m. is the most convenient time for holding classes.

The procedures for the establishment and conduct of the classes were determined as follows:

#### (a) Involvement of the Community

(i) The accommodation should be provided by the community, (ii) if possible, the community should arrange for lighting also, (iii) a special committee of villagers should be appointed for helping the project staff with the organisation and supervision of the classes, (iv) teaching resources should be drawn from the community and, as far as possible, non-formal teaching should be 'deprofessionalised', (v) teachers should be workers during the day, in order to establish a status equality with the pupils, (vi) the community should draw up lists of likely candidates for the position of teachers, participate in their recruitment, and help evaluate their work, thus paving the way for 'social control' of primary education.

#### (b) Class Organisation

(i) The classes would function for about 300 days in the year, the holidays and vacations determined by each class according to its situational needs, (ii) the class size would be restricted to twenty pupils, for better individual attention, (iii) studies of the level of Standard IV, with a modified curriculum, would be attempted in two years, but the class will be ungraded, (iv) in the first year, emphasis would be placed on breaking the illiteracy barrier, (v) nearly three-fourths of the knowledge content would be transmitted by the teacher orally, (vi) the curriculum, as well as other topics of interest to the pupils and the community would be transmitted with the help of about 1000-1200 easy-to-grasp folders and booklets, so that once the illiteracy barrier is broken, the pupils may select any reading material according to their interests and pace of learning, (vii) the principle of mastery learning would be observed, (viii) self-learning would be emphasised, (ix) useful aspects of local tradition would be combined with modern learning, (x) the attitudes of scientific enquiry, co-operation, self-confidence and self-reliance would be inculcated, (xi) the class would be more of a club than a school, and (xii) for pupils wishing to take the formal Standard IV

examination, bridging courses would be provided.

### Strategies

It was decided to enrol only illiterate children of the 9-13 age group, in batches of about 100 classes per year. Preparations for starting the first batch were completed in 1979. These included, (a) appointment of project staff, (b) discussions with the Zilla Parishad (District Development Council) for mutual collaboration, (c) appointment of Advisory Committees, (d) contact with communities, (e) organisation of meetings of local primary teachers in order to acquaint them with the project so as to involve them in base-line surveys and establishment of part-time classes, (f) conduct of a base-line survey, (g) orientation of project staff, (h) preparation of a tentative curriculum and production of teaching and learning materials, (i) decision on the content and techniques of teacher training and (j) selection of teachers.

The formal inauguration of the project took place in February 1979. A mass meeting was organised in one of the project areas where the State Chief Minister and the Education Minister explained the need for part-time, non-formal primary education. Later, a similar meeting, organised in another project area, was addressed by the President of the Zilla Parishad and the local leaders. Inaugurations, on a smaller scale, were held in the three remaining areas. Before undertaking teacher training, it was felt that we needed to gain first-hand experience of the organisation of part-time classes. With this in view, three pilot classes to be conducted personally by the field staff, for example the research officer and two project assistants, were started in October 1979.

### Recruitment of Project Staff

While research officers were recruited by advertisement, project assistants were selected from unemployed graduates in the project area. At the Institute, the main responsibility for the project was undertaken by the Project Adviser and Project Director. They put together a team of Project Officer (Administration), Training Officer, Material Production Officer and a Research Assistant. It was thought useful to create an extra post of Deputy Education Officer in the Poona Zilla Parishad, fully paid by the Institute, but under the control of the Education Officer of the district, in order to establish a close liaison with the District Administration of primary education. After a year, however, this post was abolished as the project staff had established a good working relationship with the Education Officer and the Extension Officers (Education) in whose 'beats' the project was included.

### Recruitment of Teachers

The teachers were selected by a joint panel of project staff and village leaders. The honorarium for teachers was fixed at the same rate as for teachers of government part-time classes, i.e. Rs. 50 per month.

The majority of the teachers (46) were engaged in agriculture. Ten men were labourers. Of the women, one was a primary teacher, two Balwadi

(pre-primary and creche) teachers, and the remainder were housewives, of whom two did some tailoring and needlework as a spare time occupation. As regards educational levels, the majority of teachers had studied up to Standard VII and also only twenty-seven were below Standard VII. Among these, fourteen were women.

Nearly sixty per cent of the teachers belonged to the 'advanced' castes. The remainder consisted of 'other backward classes', scheduled castes and scheduled tribes. One woman teacher came from a nomadic tribe. All the teachers lived in their own houses or huts, as the case may be. An annual household income of more than Rs. 5,000 was reported by only two teachers. The bulk of them had incomes ranging between Rs. 1,000 to 3,000. None from the scheduled castes and tribes had an income of over Rs. 1,000. However, the reliability of the income reported by the teachers could not be checked. It was obvious that the additional income of Rs. 600 per annum by part-time teaching was welcome to them. Besides, they seemed to be happy with the 'white collar' status of the teaching job as it enhanced their prestige in the community.

### Starting the Classes

By the end of January 1980, it was possible to start 90 classes. Though there was a demand for continuing education for semi-literate drop-outs, the villagers were requested to allow the project to postpone that programme. This was reluctantly agreed to. The intention of the project, its duration, organisation, and the proposed curriculum and teaching techniques were explained to the community leaders and to most of the parents. The difference between a government 'scheme' and a 'research project' was pointedly brought out in these discussions in order to enable the community to understand that it was a full participant in this pioneering action research. The pupils also were given an idea of the learning programme and of the research project in which they had become participants.

In most places, the local community readily agreed to provide rent-free accommodation. In two semi-tribal hamlets, even special sheds were constructed. For one of these, the Sarpanch (President of the Village) donated the tiles he had purchased for repairing the roof of his own house. The classes began to meet in 34 school rooms, 16 teachers' houses, 14 temples, 13 private homes, 4 panchayat offices and other miscellaneous places like cattle sheds and dharmashalas (free rest-houses).

### Enrolment

The number of pupils enrolled was 1434 of whom 1050 were girls and 384 boys. Ten classes enrolled only girls and one class only boys. The remainder were mixed classes where girls predominated. There were no noticeable reservations on the part of parents towards sending girls to classes looked after by men teachers. In a short while, the number of classes was reduced to 86 as some classes had to be amalgamated for reasons of low attendance or convenience of location.

### Project Staff - Training and Development

Except for the Project Adviser and Project Director, none of the project staff possessed any previous research training or experience. But their experience of administration or teaching in the rural areas was considered as an important basic qualification. A Block Development Officer who had initially been a teacher and educator in a rural primary training college and also Extension Officer (Education) was appointed Project Officer. Coming from a rural family of moderate means, he was well aware of the problems and needs of the local rural society. His detailed knowledge of the project areas and of rural development schemes was seen as an asset. The Training Officer who was a woman, had been a teacher educator for pre-school teachers. Since the problem of universalisation largely concerns girls, the presence of a woman training officer was expected to reassure the parents that the interest of their wards was in safe hands. The monitoring and evaluation officer had taught in a Rural Institute and possessed extensive experience in the organisation and evaluation of rural co-operatives. The arrangements for materials production were entrusted to a staff member of the Institute's State Resources Centre for non-formal education. Along with the Project Director, he was to plan, produce and edit materials prepared by the staff and several subject experts and writers from outside the Institute.

Initial and current orientation of project staff was undertaken by the Project Adviser and the Project Director. Scheduled and unscheduled discussion meetings were held for this purpose. The topics covered in the first two years were numerous. The following may be mentioned, to give an idea of the theoretical and practical aspects of staff development: (a) Problems of universal primary education; (b) Methods of action research and relating them to the problems of universal primary education; (c) Maintenance and use of research records such as teachers' daily diaries, pupil record cards, class records, class visit reports of the field staff, diaries of field staff, and analysis and consolidation of area reports; (d) Preparation of survey schedules, conducting focused surveys, analysis and consolidation of data; (e) Analysis of the existing primary curriculum, preparing locally relevant curriculum units and materials; (f) Techniques of teaching reading and techniques of imparting numeracy; (g) Techniques of developing observation and reasoning in the teachers and pupils; (h) Preparation and use of teaching materials in the rural circumstances; (i) Physiological and psychological aspects of learning in a situation of poverty and social handicaps; (j) Methods of training non-professionals to be part-time teachers; (k) Concept of mastery learning; (l) Problems of

the pupils' differential rates of learning; (m) Preparation of teaching aids and equipment to suit local conditions, (n) Development of techniques of supervision for non-formal classes and finally the training and development of field staff.

In all, ten training camps were held at Poona for discussions with the field staff. The field staff gave a systematic feedback on different aspects of the action planned on the basis of daily diaries and collective reports on each area. New ideas, strategies and programmes were developed by the whole group. They were trained to gradually take over as trainers of the teachers of part-time classes. In addition to the theory and practice of non-formal primary education, they were required to learn a few skills which they in turn could transmit to teachers. These consisted of simple yogasanas, special songs, stories to be told, preparation of word cards, sentence cards and number games, and designing learning units in local history, geography and science. They were also required to collect local dialect vocabularies, folk songs, folklore and traditional tales, with a view to using them for practice reading.

The research officers and project assistants whose ages ranged between twenty-five and forty, were encouraged to read further for the M.A. Degree (External) of the University of Poona, mainly opting for Economics, Sociology and Political Science. Those who held good Master's degrees were encouraged to undertake Ph.D work. A set of textbooks required for these courses has been provided in the Institute's library.

### Training of Teachers

The training of teachers is arranged in school rooms, temples, or any such place made available by the community. The teachers walk to the area headquarters and attend training from 11 a.m. to 5.30 p.m. for five days, every six weeks; they return to their respective villages in the evening and teach under the supervision of one or two members of the project staff. On training days an allowance of Rs. 7 per day is paid to each teacher to reimburse loss of wages.

The objectives of training are: (a) to improve the education level of the teachers; (b) to help them acquire an understanding of the problem of universal primary education; (c) to help them learn the skills of conducting non-formal primary classes; (d) to sensitise them to the importance of studying the educational problems of the community as part of its development needs; (e) to help them internalise the values inherent in the Indian Constitution, and (f) to create in them a spirit of enquiry and innovation. It is recognised that teacher socialisation of the right kind is the pre-requisite of pupil socialisation.

Training is conducted through group work in which the trainers and trainees discuss problems and prepare materials. It is a non-authoritarian and participatory process of teaching and learning, which helps build up self-confidence and self-esteem of the trainees in their new

identity as agents of education and social change. They prepare improvised learning materials for language and number, write out their work plans and learn to write reports from a research point of view. Making entries on the pupils' progress cards, finding out levels of pupil achievement and causes of non-attendance are also important parts of their training, emphasising critical reflection on the socio-economic problems of the rural communities. Acquisition of teaching skills is a process closely related to social awareness.

A circulating library is organised for them in each project area. It contains select Marathi literature and informative books. One Marathi science journal and one popular children's journal are also supplied through this circulating library system. The training material consists of a series of cyclostyled notes on various aspects of the curriculum and the process of learning. A series of 'instruction sheets' and 'guide books' for teachers of non-formal classes is now emerging out of this exercise.

### The Curriculum

The curriculum of the part-time classes takes into consideration the knowledge content which figures in the primary curriculum and recommendations of Government of India committees on curriculum revision. A unit analysis of these curricula facilitates selection of relevant units for the part-time classes. Some new units are also added. However, the units are not treated as bits of a subject-wise curricular structure, but as self-contained items of information which the learner may arrange in his own way. History, geography and science may thus merge into one another. All studies are related to the environment and human affairs. Even language and numbers are not treated in isolation from the day to day transactions or explorations of new facets of life. Reasoning and aesthetic sensitivity are sought to be developed through all activities and studies, and particularly so from an observation of the social and physical environment. Emphasis is placed on stories, songs, and simple yogasanas, by way of relaxation exercises and club activities. The awareness of basic human values and community consciousness pervades the entire curriculum, sets of materials, stories and especially the songs. The conceptual specialities of the curriculum are reflected in class arrangement, pupil/teacher relationship, peer group activities and relationship between the class and the teacher and the class and the community.

An example of how this interweaving of various curricular units is attempted may be cited here. The teacher and the pupils decide to prepare an informative booklet on their village. For this, they study its physical features, crops, flora and fauna, historical traditions and landmarks, the name of the village, its folklore, folk tales, local religious beliefs, superstitions, and above all, the manner in which the village needs to be improved. In this exercise language, measurement, history, geography, health, science, reasoning, appreciation of nature and of the design of things, and many other facets of knowledge, attitudes, interests and values are covered in an effortless manner. The awareness of the need of the community and the possible future of the village is built up in the course of such an

exercise. History becomes real on Independence Day, Republic Day and Gandhi Jayanti when pupils put up plays, take out processions and organise meetings and elocution competitions in co-operation with the formal primary school and other organisations in the community.

### Equipment and Teaching Aids

In the project areas, electricity has reached only a few villages and hamlets. In most of the part-time classes, kerosene lanterns provide the light. Four lanterns are supplied to each class which has about twenty pupils enrolled. The pupils are divided into four groups for interactive learning. Each group sits around one lantern. Even in the few places where electricity is available, learning is organised by the group work method. For prayers, stories, games and songs, the teacher and pupils sit face to face on the floor, forming a circle.

The nature of accommodation and lighting makes traditional classroom equipment like wall charts, wall blackboards and stand blackboards unsuitable. Therefore, each class has been supplied with one small blackboard which can circulate from group to group. A folding Khadigraph (flannel graph) having two flaps of foolscap size and with pockets for holding cards, has been specially designed. A set of wooden cut-outs of all the letters of the alphabet, vowel signs, and numbers is provided to each class. A canvas bag has been designed to hold all the teaching equipment, including the blackboard. The teacher can store and carry equipment in this bag even during heavy rains. The bag can be hung from a peg in the teacher's house and takes up no floor space. All this is low cost material designed by the project staff to meet the needs of non-formal, part-time primary education in the rural environment.

### Teaching and Learning Materials

The preparation of teaching and learning materials and evolving techniques of instruction and evaluation is an integrated process. Materials are intended to promote as much self study as possible and facilitate learning games and peer group interaction. Sets of cards provide basic literacy and numeracy materials. These are produced, edited and tested co-operatively through the participation of the entire project staff and teachers. Preparation of supplementary materials based on curriculum units and on the observable reading interest of pupils is assigned to several writers and teachers outside the project. Suitable materials from different publications are also adapted.

Feedback from the pupils is considered to be an integral part of the process of material production. A primer, profusely illustrated, was at first prepared under the impression that the 'primer and slate' would be expected by the rural pupils as symbols of entry into primary education. There was serious debate among the project staff about the desirability of such a primer when more effective ways could be pursued to teach language. Finally, the feedback on the primer showed that some typically urban concepts and words had crept into it and could not be grasped by the pupils. The pupils did not care much for

pictures either. It was then substituted by three sets of reading cards based on words and sentences with a local flavour. This material was received well by both teachers and pupils. With the help of the cards, learning games became easy and the pupils could also learn at their own pace. Each class was provided with three sets of cards, which could circulate from group to group. All learning aids, even slates, were made class property. These were distributed to pupils when class began and put back systematically before they left. Nothing was taken home. Everything was to be used very carefully as it belonged to the whole class. Besides, the pupils were not given any 'homework' in the usual sense. Instead, they were asked to observe natural phenomena, vegetation, birds, animals, insects, rocks and soil, sources of water and food and report their experiences to the class. They were also encouraged to collect specimens of different objects. The class collection was meant to be studied by the teacher and pupils for classifying and describing its contents. This constituted an exercise in enquiry and reasoning. Language practice and number exercises were often based on such collections. The pupils also made toys and figurines from clay, did drawing and handwork, for the latter using local materials like straw, nuts and seeds.

#### Teaching Methods and Learner Evaluation

Teaching methods are based on the principle of self-learning. The men teachers are called Bhau (brother) and women teachers Tai (sister) in order to establish an informal, non-authoritarian relationship between the teachers and the taught. The teacher is to be looked upon as an adult brother or sister who plays the roles of stimulator, guide and co-ordinator of learning activities and becomes an accepted arbitrator in the disputes common among immature peer groups. Being free from continuous teaching in class, the teacher finds time to observe each pupil and record his or her progress carefully in the daily diary and the progress card. Not being required to talk all the time or engage in the exhausting question and answer recitation common in formal schools, the teacher remains relaxed and is alert to the guidance and needs of different pupils. While learning with the help of cards the pupils help one another in testing the expected acquisition of literacy and numeracy. In this progress, the pupils constantly interchange the roles of the tutor and the taught but the teacher is always acknowledged as their guide and referee.

The project views evaluation as a continuous process which does not classify pupils into the 'pass' and 'fail' categories. However, teachers and parents were looking forward to a periodical examination. They felt that this would make the pupils pay better attention to their studies. The suggestion was accepted but an innovative way was found to adjust it to the learning system. It was decided to call the teachers and pupils from a number of classes to a suitable central village for participating in a Bal Jatra, that is, children's fair, where along with amusement, the pupils would engage in guided self-evaluation. The project staff prepared evaluation tools, evaluation records and instructions for teachers and pupils. The co-operation of selected villages was sought for organising the Bal Jatra. They

made arrangements for games, sports, clean drinking water, and a happy and festive atmosphere. Pupils came to the Bal Jatra in small processions, singing a cadre song especially written for them. For half the day they played, sang group songs and listened to stories told by the teachers and project staff. In the afternoon, they broke into small groups in order to test themselves with graded evaluation tools for literacy and numeracy. They also demonstrated skills in telling stories, answering a quiz, and singing songs. The performance of each pupil was observed by a pair of 'external' teachers, who carefully filled an evaluation sheet, according to instructions therein.

In the Bal Jatra of June 1980 the tests were directed mainly towards finding out how many pupils had crossed the illiteracy barrier. In the second Bal Jatra held in December 1980, it was decided to find out how many pupils could read fluently, how many came close to the fluency level and how many still had reading difficulties. The graded evaluation material covered five steps leading to fluent reading. Similar materials were prepared for numeracy based on six graded steps. It was found that 28.85 per cent of children could read any given material fluently. The percentage of those who read 'well', but did not reach the 'fluency' level was 24.29. Cumulatively, therefore, 53.14 per cent of pupils had adequately mastered reading skills in about one year. However, 46.86 per cent of pupils managed to read words with fair ease but stumbled on sentences. These pupils were placed in the 'barely literate' category. The fourth category consisted of 170 pupils who were still struggling with the alphabet.

As regards numeracy, about 51 per cent of pupils had mastered addition and subtraction, arrangements of sets, and actual counting of objects up to fifty. About 26 per cent had proceeded beyond this stage. Most of the pupils could do simple mental arithmetic connected with daily transactions.

### Discipline

The discipline of the pupils both in the Bal Jatra and in classes has been extraordinarily good. The part-time classes have no bells either to call the pupils or to dismiss class. Pupils come mostly in groups. When they finish the day's work they go home for a wash and a quick meal, collect one another and come to the class. In the beginning, each class was provided with a bucket, napkins, a small mirror and combs to help the pupils to spruce themselves up before class began. After some time, this arrangement became superfluous since the pupils soon learnt to tidy themselves up at home. If there are any pupils who are afraid of the dark or have to be encouraged to attend the class, the teacher makes a round of the village to collect them. The fear of ghosts and wild animals is widely prevalent. Crossing streams and walking through dark patches of the jungle at night become easier in groups.

The equipment in the class and Bal Jatra appears to be safe. In the first Bal Jatra a few pupils were tempted to pocket coloured crayons. But the staff dealt with such incidents tactfully by making all articles the property of the user groups and making them responsible for their safety.

The manners and etiquette which the pupils have absorbed surprise many an outsider. They greet everyone they meet, young or old, known or unknown. They speak boldly, take part in discussions, play and laugh but control the classes themselves. Taking out teaching and learning materials and putting them back systematically is their job. Very few slates have been damaged, though the cards are now soiled and books are slightly frayed at the edges. But there has been hardly any loss of materials.

The relationship with teachers has also been good. It was only in one class that the villagers found a teacher taking undue interest in one of the older girls. They managed the situation quietly by finding another teacher. Community control and the sense of responsibility which working children appear to possess seem to be important factors in the maintenance of good discipline.

### Micro Studies

Four micro studies were carried out as an integral part of action research. These were: (a) profile of the pupils, (b) profile of the teachers, (c) causes for dropping out from the part-time classes, and (d) motivation for the enrolment of girls. Some interesting points from the studies are given below:

#### (a) Profile of pupils

The 1434 pupils enrolled in the first batch ('A' batch) came from 1213 families. Nearly 55 per cent of families were below the poverty line. The main occupation of parents was agriculture and allied labour, labour on construction works and artisanship. As regards education levels, only 22 parents had gone beyond the primary stage. Among the mothers, only 93 had been to a primary school. While the father was illiterate in the case of 919 pupils, the mother was illiterate in 1251 cases. In the total enrolment, pupils between the ages of 9 and 13 predominated. Of the total number of enrolled pupils, only 71 boys and 103 girls had been to school earlier, but dropped out before acquiring literacy. As many as 42 had left from Standards III and IV. The majority had left from Standards I and II.

#### (b) Profile of teachers

Apart from the low level of education and economic conditions of the part-time teachers already referred to, it was noticed that women teachers were hard to find. Also, in the interior villages and hamlets, it was difficult to find even 10 per cent of adults who had completed primary education up to Standard VII. Some of the classes where pupils had willingly enrolled remained without teachers and had to be closed.

#### (c) Drop-outs

By December 1981, there were 439 cases of irregular or non-attendance in the 'A' batch. Among these 320 were girls.

Migration accounted for 45 girls and 43 boys. While 49 pupils (40 girls and 9 boys) left because their age exceeded 14 years, 95 pupils (93 girls and 2 boys) left to get married. Overwork restrained 49 girls and 6 boys. Reluctance of parents was responsible in 42 cases (35 girls and 7 boys). There were 25 transfers to formal schools, (12 boys and 13 girls). Ten boys were in bonded labour and their employers were unwilling to send them to the classes. A further detailed study of non-attendance is being made. The custom of early marriage of girls around the age of 12-14 is still widely prevalent in the rural areas. In the case of girls, therefore, the constitutional directive of universal primary education for the 5-14 age group seems to be difficult to achieve. Very few girls can hope to remain without marriage and to attend school after the age of 12 or 13, though the legal age for marriage for girls is now 18. These cases go unnoticed because registration of marriages is not yet systematically enforced.

(d) Motivation for enrolment of girls

In this project, it has been decided that rather than offer extrinsic incentives for enrolment and attendance, a search should be made for intrinsic motivations within the environment and circumstances of pupils. That is why even free books and slates are not provided individually as personal possessions. In spite of this, the enrolment, particularly of girls, has been surprisingly large. Motivation for enrolment and attendance was investigated through a sample survey. Responses of parents and pupils were canvassed separately and compared. The parents emphasised the utility of part-time education for helping the girls to keep accounts, read letters and receipts and similar documents, and generally to manage day to day affairs. They also felt that a girl should usefully spend her evenings and the part-time classes offered an opportunity for this. A few parents hoped that the acquisition of some education by their daughters may help them in finding educated sons-in-law. Pupils had slightly different viewpoints. They appreciated the help they would get for keeping accounts, writing letters, but they also said that when young they used to feel unhappy at not being able to attend school and that part-time classes had now given them a chance they had missed and they were certainly happy to use it.

### Impact on the Community and the Zilla Parishad

As the project progressed, members of the community began to take an increasing interest in the classes. Some insisted that the pupils should be punished if they did not learn properly. Others suggested memorisation as an effective way of learning. The project staff held several discussions to explain the techniques used in the classes to stimulate self-learning and self-discipline. However, it was only after the good performance of the pupils in the Bal Jatra that the villagers were impressed with the new methods which had at first appeared strange. Besides, on the Independence Day and Republic Day the pupils, especially girls made speeches and put on plays. The leadership taken by girls

was an unusual but gratifying spectacle for their parents and the community. It was admitted that the pupils had become brighter and bold. After this, community support began to come forth in small ways. Apart from free accommodation, some villages provided free lighting. In two places, the local youth groups gave some books and equipment. The transfer of a few pupils to Standard III of the full-time primary school also became a point of appreciation. In some villages, teachers of the full-time schools willingly collaborated with the teachers of the part-time classes in organising festivals, national days, and Bal Jatra. Some teachers requested to be allowed to use the reading materials of the project as these had proved effective for beginning reading. The songs especially written and set to tune for the part-time classes became popular in the full-time primary schools also. In several villages the local leaders have begun to raise questions about the follow-up of part-time education and some have come forward with suggestions for non-formal "post primary" education.

The Zilla Parishad has been not only co-operative but has begun to use the new learning materials for its own non-formal classes. A programme for training the Zilla Parishad teachers to use these materials and in general to conduct part-time classes, was held in collaboration with the Institute.

#### Second Phase - 1981

A process of analysis of the project as it developed in 1980 indicated a need for some change in teaching and learning materials and organisation of teacher training. A different approach was, therefore, adopted for the preparation of literacy and numeracy materials for the new batch 'B.' It was also decided to decentralise teacher training to the extent possible. The second batch of classes was to start in August. This time the communities were involved in the enrolment in this programme much more than in the first batch. Lists of prospective pupils were prepared and checked with the help of primary teachers and members of the community. Since only illiterate pupils were to be enrolled, tests were organised for pupils from clusters of villages. Dates for the tests were announced by the village crier. From the experience gained in the previous year, it was decided to enrol children of the 8+ to 12+ age group, calculating that the older pupils would be reaching the age of 14 years by the time they completed the course in part-time classes. Teachers of the 'A' batch assisted the project staff in testing the children who came for admission. The Gram Panchayats (village councils) in most places gave the necessary facilities. In all 1622 pupils were selected. Of these 1257 were girls and 365 boys. Occupation-wise the break-up of the pupils was as follows: labourers - 202, care of livestock - 791, household work - 560, farming - 42, bonded labour - 5. The remaining 20 pupils did miscellaneous jobs. One pupil frankly recorded 'begging' as his occupation. Though 108 classes were demanded by the villages concerned, 100 were finally started. The recruitment and orientation of teachers followed the previous year's pattern. However, more training responsibility was given to the field staff, for instance the research officer and project assistants. The question of establishing village education committees was again taken up. In all 39 commit-

tees were established. For the present they have agreed to the following functions: (a) arranging accommodation for the classes; (b) repairs to or construction of accommodation; (c) provision of electricity or kerosene; (d) giving books and equipment; (e) providing clean drinking water, accommodation and other facilities for the children's fair; (f) organising programmes for the pupils from the non-formal classes on Independence Day, Republic Day and Gandhi Jayanthi; (g) giving prizes for competitions on days of national importance; (h) visiting the classes, arranging for the safety of the girl pupils, settling disputes among the pupils or between the teachers and the community; (i) finding teachers for reviving the closed classes; (j) generally supervising the classes; and (k) planning programmes of community level education.

In one village, the committee offered to even collect funds for the teacher's salary. Discussions are being held with some of the highly motivated committees in order to evolve comprehensive local educational plans.

### Comparative Costs of Formal and Non-Formal Primary Education

#### (a) Full-Time Primary Education

The costs of formal full-time primary education provide the background against which the costs of non-formal part-time primary education can be examined. Salaries of teachers and contingencies for minor monthly expenditure usually figure in the per capita costs of primary education. In Maharashtra the per capita, per annum costs, up to Standard VII, are calculated at Rs. 180 - and from Standard I to IV, at Rs. 160 - approximately. In the case of a child regularly promoted from class to class, the cost of education for four years would amount to Rs. 640.

#### (b) Non-Formal Primary Education

The experience gained in two years of the Action Research Project shows that an expenditure of Rs. 1480 is required per class of 20 pupils during the first year, and about Rs. 1280 per class during the second year. For the two year course of Standard IV (or up to that level) the cost amounts to Rs. 2760 excluding teacher training costs of Rs. 320 per teacher per year. The following details will make the position clear:

##### First Year

|       |                                                                          |         |
|-------|--------------------------------------------------------------------------|---------|
| (i)   | Non-recurring equipment                                                  | Rs. 300 |
| (ii)  | Recurring at Rs. 20 p.m. x 12                                            | Rs. 240 |
| (iii) | Materials for teaching and learning<br>Rs. 70 per set x 3 sets per class | Rs. 210 |
| (iv)  | Teacher's honorarium: Rs. 50 p.m. x 12                                   | Rs. 600 |
| (v)   | Training cost per teacher: Rs. 40 x 8<br>(5 day sessions)                | Rs. 320 |

|       |                                                         |     |       |
|-------|---------------------------------------------------------|-----|-------|
| (vi)  | Evaluation                                              | Rs. | 80    |
| (vii) | Muster Roll, teacher's salaries, pupils' progress cards | Rs. | 50    |
|       | Total                                                   | Rs. | 1,800 |
|       |                                                         |     | ===== |

#### Second Year

In the second year, new equipment is not necessary. Repairs or replacement of non-recurring items cost about Rs. 100. The other expenditure remains the same. Therefore, the budget in the second year gets reduced by Rs. 200 per class and amounts to Rs. 1,600, that is Rs. 1,280 excluding teacher training costs. The per capita average annual cost comes to Rs. 69 or Rs. 138 for the two year course.

#### (c) Opportunity Costs

In the full-time primary school, the parents are required to spend at least something on books, stationery and the like. Besides, the pupils in a full-time school can neither earn wages nor help the adults in their labours for indirectly adding to the income of the family or for saving the cost of hired labour. In the part-time classes, the enrolment consists of those children who have to work during the day. A survey of their occupations has shown (in the project area) that a child of 9-14 may often earn Rs. 4 per day, on an average, for 200 days in the year or may engage in household tasks or assistance to parents, of which the value would amount to similar wages, though this income is not visible. About 1,000 pupils earn wages of Rs. 4 per day on an average. Their cumulative daily earnings thus amount to Rs. 4,000 per day. Assuming that they work for about 200 days in the year, the total annual earnings would amount to Rs. 800,000 - Rs. 1,600,000 in two years. Their contribution to the maintenance of the family seems substantial. It is also a significant addition to the national income. In a poor country, this is not a minor point which can be brushed aside. As against this income which accrues to the pupils, the expenditure on their part-time education would amount to Rs. 138,000 or, to put it in round figures, about Rs. 140,000. These are points which education planners may find worth examining. Also, there appears to be some scope for increasing the expenditure on teacher training. Two seven-day camps for teachers could be held for intensive training, with full reimbursement of the teachers' loss of wages. The desire of most of the teachers to continue their own education could be satisfied through correspondence cum guidance courses. The rural areas could then begin the process of becoming a "learning society", without stoppage of its normal income.

#### Some Problems

Experience shows that enrolment and even satisfactory attendance in the part-time classes is not much of a problem. The villages in the project area seem to have awakened to the need for primary education for all and appreciate the idea of evening classes for children who have to work during the day. However, as the programme spread in the interior,

the difficulties of finding teachers increased. In some hamlets very few adults had received primary education. Even if there are primary schools, mostly single teacher schools exist in the vicinity of such hamlets. A teacher who works full-time cannot undertake the responsibility of evening classes. Walking at night through difficult terrain and conducting a part-time class is not an attractive prospect. In the area nearest to Poona, namely Panshet, the attraction of the city results in teacher desertion. Television has reached this area and the timings of its entertainment programmes clash with those of the part-time classes. This makes the pupils irregular in attendance and there are consequent drop-outs. The majority of the pupils of 'A' batch can read well and are asking for continuation of their education beyond two years. The project will have to consider this demand.

Of the drop-outs from the non-formal classes, girls of the traditionally 'marriageable' age of 12 to 13 constitute the majority. Whether this project can undertake a movement for social awakening for raising the age of marriage as required by law, is a moot point. The path in this respect is not quite clear as yet. These problems hold many challenges.

#### A Community Plan of Education

The communities which have now participated in planning and conducting the part-time classes in the action research project have become aware of their capability to think about their education problems. Some villages have suggested short follow-up courses in health, child care and nutrition, occupational skills and so on. They are ready to find part of the resources and help plan and organise the courses. This is what the project was hoping for. A suggested plan which they may consider would be of the following type:

| <u>Age</u> | <u>Programme</u>                                                                                                                                                                                                                                                                                                               |                                                                |
|------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| 0-3        | Education of parents (particularly of mothers) to promote better nutrition, health and immunisation practices. An understanding of the biological and sociological aspects of child development and required roles of parents. Overall social awareness and literacy (if necessary) would be the foundation of this education. |                                                                |
|            | <u>Formal Programme</u>                                                                                                                                                                                                                                                                                                        | <u>Non-Formal Programme</u>                                    |
| 3-6        | Pre-school education                                                                                                                                                                                                                                                                                                           | Play centre activities (even up to the age of 7, if necessary) |
| 6-11       | Primary education up to Standard IV                                                                                                                                                                                                                                                                                            | Part-time primary education for the 9-14 age group             |
| 11-14      | Primary education up to Standard VII                                                                                                                                                                                                                                                                                           | (a) as above<br>(b) flexible courses for the 13-17 age group   |

- 15-18      (a) A small proportion of this age group will enter Secondary schools.
- (b) A few may still linger behind in the upper classes of primary schools.
- (c) It is also possible that those who completed primary education up to Standard IV some years before will study the formal curriculum further in continuation classes.
- (d) The majority will require non-formal education relevant to their needs, aspirations and environment.
- 18+        At this level, all or as many members of the community as possible will engage in adult education of some type or the other, according to their needs.

The formulation of such a plan by the community may take the Action Research Project into further experimentation, probably over the next ten years.