

## Research in Elementary Education

### A TREND REPORT

J. S. GREWAL

I. D. GUPTA

In India, efforts towards universalization of elementary education were stepped up especially after independence when the education of children in the age-group of 6-14 years was accepted as their constitutional right. This obligation remained unfulfilled as resources were inadequate during the early years of independence. Other sectors of education, especially higher education, received more attention than the universalization of elementary education. A shift in policy, however, appeared after 1976, when more resources were made available for elementary education—formal and non-formal. This shift in emphasis gained further momentum with the launching of the National Policy on Education (NPE)—1986 which has underlined the importance of elementary education. The NPE has been elaborated in the Programme of Action, paving the way for programmes like Operation Blackboard.

Research related to elementary education is a phenomenon of the post-independence period. The first study in the field was a doctoral thesis on compulsory education by Desai (1951). In all, 208 researches on this subject have been located to date. Of these, nine belong to the 50s; 25 to the 60s; 68 to the 70s; and 106 to the 80s. One-third of the studies appeared during the 70s and one-sixth prior to the 70s. Evidently, a little more than half of the work done has appeared during the last eight years only.

The research studies conducted fall in several categories: history, developmental surveys, universalization, pupil-assessment, curriculum development, evaluation, school systems, teacher characteristics and training, educational costs, and research needs. An analysis

of the studies is detailed in Table 25.1.

Table 25.1

#### RESEARCH IN ELEMENTARY EDUCATION ACROSS THE DECADES

Theme/Decade	50s	60s	70s	80s	Total	%
I. History	1	1	2	7	11	5.3
II. Development	..	3	15	10	28	13.4
III. Universalization	6	8	20	29	63	30.2
IV. Pupil Achievement and Development	..	7	10	17	34	16.4
V. Curriculum Development	1	2	8	32	43	20.6
VI. Evaluation	..	..	2	1	3	1.5
VII. School Systems	1	1	6	4	12	5.8
VIII. Teachers and Teacher Training	..	3	4	4	11	5.3
IX. Economics	..	..	1	1	3	1.0
X. Researcher Needs	..	..	..	1	1	0.5
<b>Total:</b>	<b>9</b>	<b>25</b>	<b>68</b>	<b>106</b>	<b>208*</b>	<b>100.0</b>
<b>%</b>	<b>4.4</b>	<b>12.2</b>	<b>32.7</b>	<b>50.7</b>	<b>-</b>	<b>100.0</b>

\* This number includes studies from other areas having some relevance to elementary education.

It is evident from Table 25.1 that the maximum number of studies, around 30 per cent, have been in the area of universalization. The next prominent area is that of curriculum development, around 21 per cent of the investigations. Pupil assessment studies contribute nearly 16 per cent and developmental surveys 13 per cent of the

studies. Studies of history, school systems and teachers contribute 5-6 per cent each; 1.5 per cent of them relate to evaluation; two (1.0 per cent) study costs; and one is devoted to research needs (0.5 per cent).

The studies reviewed include individual doctoral dissertations approved by various universities and studies approved or undertaken by institutional agencies. The latter include the universities, the NCERT, NIEPA, SIEs/SCERTs and other agencies. The analysis presented in Table 25.2 indicates that around 36 per cent of the studies are doctoral dissertations, around 20 per cent are by the NCERT and SCERT/SIEs, and the remaining 44 per cent by other agencies. Among the other agencies, specific contributions have been made by NIEPA on the administrative aspects and development of elementary education, by the Bombay Municipal Corporation in the area of universalization and curriculum development and by CASE in the area of pupil assessment and programme evaluation. The Demographic Research Unit (DRU), Calcutta, has contributed in the area of development surveys and the tribal development authorities in the area of tribal education.

Table 25.2

## RESEARCH IN VARIOUS THEMES OF ELEMENTARY EDUCATION ACROSS AGENCIES

Theme/Agency	Universities: Doctoral Studies	NCERT: Project Studies	SIE/SCERT: Project Studies	Others: Development-Projects	Total	%
I. History	11	..	..	..	11	5.3
II. Development	11	..	2	15	28	13.4
III. Universalization	10	3	16	34	63	30.2
IV. Pupil Achievement and Development	19	2	1	12	34	16.4
V. Curriculum Development	21	5	6	11	43	20.6
VI. Evaluation	..	..	2	1	3	1.5
VII. School Systems	3	..	3	6	12	5.8
VIII. Teachers and Teacher Training	..	..	..	11	11	5.3
IX. Economics	..	1	..	1	2	1.0
X. Research Needs	..	..	..	1	1	0.5
Total :	75	11	30	92	208	100.0
%	36	5	20	44	-	100.0

An analysis of research trends in various aspects of elementary education is presented in the following pages. But before it is presented it is necessary to mention that this is the first time that a separate trend analysis of research in elementary education has been included in the series of surveys of educational research in India. The first three surveys did not deal with elementary education as a separate area of research. In view of this all studies of elementary education distributed over the three previous surveys under different heads have been collated with the studies undertaken during the studies conducted in the period covered in the present (fourth) survey. In all, 31 studies have been identified from the first survey, 23 from the second, and 63 from the third. It is, of course, possible that some studies have escaped our attention. Ninety studies belong exclusively to the fourth survey. Of these, 43 studies are included in the present section and 47 appear in other sections.

## I. HISTORY OF ELEMENTARY EDUCATION

In all, 11 studies are concerned with the history of elementary education.

As mentioned earlier, the first study by Desai (1951) traces the history of elementary education in the Indian context. It divides the whole period in six stages. The first stage starts in 1830 when the government accepted responsibility for education. The second stage extends from 1882 to 1910 when the Indian Education Commission was appointed by the government. At this point of time, Indians showed their concern for compulsory schooling. The third stage, from 1910 to 1917, covers the heroic attempts made by G.K. Gokhale and others to get the principle of compulsory primary education accepted. The fourth stage, from 1917 to 1930, is stage of acceptance of statutory compulsory education by almost all the Indian provinces. The fifth stage, from 1930 to 1950, can be called the stage of experimentation in compulsory education. The sixth stage, from 1950 onwards, can be described as the stage of meeting constitutional requirements. Desai study highlighted the problems related to compulsory at various stages.

Another important historical study is by Sapra (1980) who studied the evolution of policy as a result of the deliberations of Central Advisory Board of Education (CABE) in the post-independence period. The CABE had pleaded, from time to time, for giving high priority to primary education and recorded its recommendations on all aspects of elementary education. But

it suffered from several weaknesses in that it did not follow any specific pattern for selecting problems; that its policy regarding the targets changed from time to time; that its attitude towards controversial issues, especially the teaching of English softened during the period; that its recommendations did not help decentralization and that the growing size of its membership tilted the balance in favour of the central government, thus diluting the federal character of the Board.

The history of elementary education at the state level is reflected in eight studies. Das (1968) studied the evolution of elementary education in Orissa during the period 1904-47; Gupta (1974) in the Haryana region of then Punjab state for the period 1935-69; Mandal (1976) dealt with the history of primary education organized by local authorities in Bengal; Purkait (1981) studied primary education in West Bengal under the Montagu-Chelmsford Reforms and its impact in the post-independence period; Baruah (1981) studied the growth of primary education in Assam over 1874-1974; Kapadia (1984) studied the development of primary education in Gujarat after independence; Gogate (1984) traced the growth of primary education in the Marathwada region; Acharya (1984) analysed its history in Tripura and Kachar; and Jain (1985) traced the history of primary education under local bodies in Maharashtra.

Besides the history of primary education at the national or state level, a study by Singh (1981) conducted at micro level analysed the records of primary education in the Varanasi district of Uttar Pradesh.

## II. DEVELOPMENTAL SURVEYS

Twenty-eight surveys have been conducted to trace and study the development of primary education. Of these one relates to primary education in Bangladesh, two to Calcutta and its surroundings, one to the district of Ghazipur, two to the regions of Telengana and Marathwada, and 22 to various states of India. Chronologically, the first three studies were conducted during the 60s, 15 during the 70s and 10 during the 80s. Evidently, survey studies began at the state level. The first study was by Tiwari (1964), surveying the situation in Uttar Pradesh through a perusal of the documents. Kamalamma (1969) studied the history and problems in Kerala State, Sharma (1973) in Punjab and the Finance and Planning Department of Andhra Pradesh (1974) those in the Telengana region.

During the early 70s, some studies were conducted in relation to the progress and problems of primary education under the panchayat raj system which was introduced around 1960. Joshi (1973) studied this aspect in South Gujarat; Iqbal Narayan and others (1974) in Rajasthan; Patel (1975) in Mehsana district Gujarat; and Shinde (1975) in Panchmahal district of Gujarat. These studies indicate that the panchayat raj system was not able to improve the qualitative aspect of primary education. Even quantitative improvement did not make much headway. The local community groups could not be brought closer together as panchayat leadership was based on caste and political considerations. In some cases, scheduled caste students could not attend schools running in temples. Most of the single-teacher schools were manned by inexperienced teachers. Village panchayat committees were relatively more effective than taluka panchayat committees.

The National Institute of Educational Planning and Administration (NIEPA) studied the administration of elementary education in relation to the programme of universalization in nine states. Reports on all these were brought out by the NIEPA (1979). The findings in general were that the annual census of school-age children was, by and large, incomplete or illconducted; the assessment of dropouts was also similar; planned efforts to enrol non-attending and dropout children were inadequate; school timings lacked flexibility and were not adjustable to suit local conditions; the majority of the teachers did not reside at the place of their posting; incentives to non-attending children were inadequate. However, midday meals and reading and writing materials were made available to scheduled caste and scheduled tribe students, to some extent. There was very little monitoring and supervision by higher officials.

Studies of elementary education at the state level have continued into the 80s and include the survey by Das (1979) of the position in Assam; by Mandal (1980) for Bihar; and by Lyndem (1985) for Meghalaya. Sachidanand (1982) analysed the statistics from the reports of Census and Planning Commission to study the expansion of elementary education in Bihar in the context of socio-economic, cultural and political factors.

Developmental surveys have also been attempted at district and lower levels to identify local-specific problems. The studies include those of progress and problems in the rural areas of districts adjoining Calcutta by Sarkar and Das (1980); in the Khasi and Nainital hill region by Saikia (1981); in the Marathwada region by

Gogate (1984); in the Greater Calcutta region by Dutta (1985) and in the rural areas of Ghazipur district by Rai (1987). Besides these, a survey was conducted by the SIE, Gujarat (1965), to identify the problems of supervision and also the views of supervisors about the primary school curriculum. A study by Sharma (1984) collected the opinions of parents about the primary school system. Islam (1983), in his doctoral dissertation, investigated the factors affecting the growth of universal compulsory primary education in Bangladesh since 1947.

### III. UNIVERSALIZATION OF PRIMARY EDUCATION

Universalization of Primary Education is the single most crucial problem in education in developing countries. Wastage, stagnation, non-attendance and non-enrolment are the major problem areas. The causes of the problems are both area-specific and policy-specific. Measures are urgently required to improve the situation. Research in this regard has been on the increase. More than 30 per cent of the studies are related to the problem of universalization alone. An analysis of these studies is presented in Table 25.3.

Table 25.3

#### STUDIES ON UNIVERSALIZATION OF ELEMENTARY EDUCATION

Aspects	50s	60s	70s	80s	Total
<b>I. AREA SURVEYS</b>					
India	..	1	1	..	2
States	..	2	3	6	11
Districts	1	..	2	5	8
<i>Total:</i>	1	3	6	11	21
<b>II. HABITAT SURVEYS</b>					
Urban	4	2	2	..	8
Rural	..	..	2	6	8
Survey Errors	1	..	..	1	2
<i>Total:</i>	5	2	4	7	18
<b>III. POPULATION SURVEYS</b>					
Scheduled Castes	..	..	1	2	3
Scheduled Tribes	..	1	4	1	6
Girls	..	..	1	..	1
<i>Total:</i>	..	1	6	3	10

IV. MEASURES					
Ungraded Class	..	2	2	1	5
Enrolment Drive	..	..	2	1	3
Teachers & Training	..	..	..	2	2
Midday Meals	..	..	1	1	2
SITE Programmes	..	..	..	1	1
Community Involvement	..	..	..	1	1
Evaluation of Policy	..	..	..	1	1
<i>Total:</i>	..	2	5	8	15
<i>Grand Total:</i>	6	8	21	29	64

The table indicates a growing trend as only six studies were conducted during the 50s; eight during 60s; 21 during the 70s and 29 during the current decade. Of these studies, 49 relate to surveys of the settings and 15 to the measures adopted for their improvement. Of the 49 survey reports, 21 made analyses on the basis of administrative divisions (India, states, districts), 16 were on the basis of residence of children (urban, rural), 12 on the basis of caste (SC, ST) and six on the basis of gender (male, female). Besides this, two reports presented a meta-analysis on these surveys, thus reporting the errors contained in the studies. Fourteen studies relating to the measures adopted for universalization are on themes like the impact of curriculum changes, enrolment drives, teacher characteristics, teaching methods, provision of midday meals and policy analyses.

#### 3.1. Area Studies

Among the surveys of wastage and stagnation, two were conducted at the national level. Sharma and Sapra (1969) studied the problem in depth through a sample from 92 schools of Punjab, Rajasthan, Maharashtra, Himachal Pradesh and Delhi. Khan (1972) reviewed studies on wastage conducted in the country and analysed the available information applying the methodology suggested by UNESCO. He found that the dropout ratio was more in the four-year primary school than in the five-year school. Besides these dropouts, stagnation was also taken into consideration. The input-output ratio was 94 per cent for girls and 71 per cent for boys, with an average of 87 per cent.

Studies pertaining to wastage, stagnation and non-enrolment at the state level include those conducted in Haryana by the SIE (1969); in Assam by Dass (1969); in Andhra Pradesh by the Bureau of Economics and Statistics (1970); in Orissa by the SIE (1972); in Madhya Pradesh by the Government Collage of Education,

Jabalpur (1973); in Kerala by Pillai and others (1980); in Karnataka by Kashinath (1980); in Tamil Nadu by Vatsala (1981); in Rajasthan by Sharma (1982); in Manipur by Devi (1983); and in Uttar-Pradesh by the SIE (1986).

In order to understand the phenomena of wastage, stagnation and non-enrolment in local-specific situations, eight studies have been conducted at the district level. Dandekar (1955) investigated this phenomenon in Satara district; Dass (1970) in the district of Sibsagar; Barua (1971) in the subdivisions of Sibsagar and Goleghat; Srivastava and Gupta (1981) and the ISES (1981) in the Tumkur district; the A.N.S. Institute of Social Studies (1981) in the Hazari Bagh district; and Krishnamurthy (1985) in Renga Reddy district.

Survey studies regarding wastage, stagnation and non-enrolment were actually initiated in its Worli area of Bombay city by the Bombay Municipal Corporation (BMC) in 1955. The corporation published several reports on this crucial subject. These include surveys of non-enrolment (1956), wastage (1956), age of entry of children (1958), and wastage and stagnation in the whole of the Bombay region 1950-58 (1967). Besides these efforts of the BMC, Sane (1960) investigated the phenomena of non-enrolment and irregular attendance of primary school children in the backward areas of the Poona Municipal Corporation. Tiwari (1970) analysed the dynamics of dropout children in the same city. These seven studies on the problems of universalization in urban areas were conducted up to the early 70s. Thereafter, the emphasis appears to have shifted in favour of studies in the rural sector. The SIE, Haryana (1974) made a beginning by studying primary education in Hayatpur, a village about ten kilometres from Gurgaon. Dass (1975) undertook a comparative study of educational wastage in 743 rural and urban schools of Assam. Sarkar (1980) of the Demography Research Unit (DRU), Calcutta, conducted a pilot investigation on dropouts among the rural population and then made a survey of primary education in 72 sample villages in the districts around Calcutta (1980). Seetharamu and Usha Devi (1981) studied rural dropouts in Karnataka, Naik (1982) in the agro-climatically different areas of Pune, Hussain (1982), in the rural areas of Bhilwara district of Rajasthan and Prasad and Sharma (1982) in six rural districts of Andhra Pradesh.

### 3.2 Habitation Studies

Two reports appeared as rejoinders to the surveys conducted by the BMC in the Bombay urban area (1958)

and by Sarkar of the DRU in the rural area around Calcutta (1980). These studies reported observations on the census conducted by the investigators. The BMC found that the 1951 census had failed to enumerate more than half the number of non-attending children. Even of those who appeared before enumerators, 58.5 per cent failed to join the school. A large majority of them had gone to their native places outside Bombay and had not taken their school-leaving certificates. Domestic work and the reluctance of the parents were found to be the two major causes for non-attendance. Gainful employment of children, contrary general belief was not found to be a substantial reason for non-attendance. In the Calcutta survey, reporting errors were analysed and it was found that there was suppression of facts regarding non-enrolment, more by females, especially literate mothers.

### 3.3. Population Studies

In the addition to the 37 area studies and ten relating to the universalization of education, separate studies on special target groups of SC/ST were also conducted. The beginning was made by Gujarat Vidyapeeth where Bihari (1969) and Massavi (1971, 1976) studied wastage and stagnation among tribal children. Pratap and others (1971) conducted a similar study in the tribal area of Andhra Pradesh and Agarwal (1972) in Mahendragarh block of Madhya Pradesh. Shrivastava (1986) investigated the phenomenon of stagnation among tribal and non-tribal students of VIII grade having a bearing on socio-psychological aspects.

A second set of findings on tribal populations related to cases in which several schools were on record but many of them were non-functional. Thus the wastage was quite high. Ashram schools had lower wastage ratios than panchayat schools. The first grade was the most critical stage for wastage. Agricultural operations, festivals and marriage ceremonies were directly related to absenteeism. Child labour was another factor. Wastage and stagnation, by and large, were due to ignorance among parents. Ill-equipped schools, teaching through a language other than the mother-tongue, physical fitness and unsuitable curriculum were other factors.

Three studies were conducted to identify the problems of scheduled caste children. Punalekar (1975) studied the reasons for dropout among Harijan children of Eastern Uttar Pradesh; Pimpley (1981) investigated the problem of non-attendance among scheduled caste

children in Haryana; and Dhongade (1986) conducted a critical study on non-enrolment, wastage and stagnation among scheduled caste boys and girls in Aurangabad district during the first two years of schooling. The UP study indicated that there was a growing awareness among parents concerning the need for education but some of them felt helpless in the matter of continuing the education of their children. The panchayats paid only marginal attention to education and village leaders were generally apathetic and unmotivated. The teachers were often found to be biased and guilty of discriminating between children on the basis of caste.

Women education was the theme of only one study. Majumdar and Chaudhary (1978) explored the reasons for disparity in the sex ratio at the level of primary education.

### 3.4. Universalization Measures

Fifteen studies related to the measures taken or experimented on to improve universalization of education. Like the survey studies, experimental measures were also initiated by the BMC. It conducted an experiment to check stagnation and under-achievement through parallel classes in Bombay's municipal schools (1968) and also an ungraded unit experiment (1969). Both these experiments suggest that ungraded classes should be arranged for under-achievers and, since the lag in their achievement is generally of not more than six months they should not be held back for a full academic year. Gupta (1974) conducted a similar study in Delhi schools; Joshi (1980) in schools of Rajasthan; and Pillay (1982) in Tamil Nadu schools.

Sharma (1977) and Saxena (1982) studied the impact of an enrolment drive in Rajasthan. Sharma (1982) studied this activity from another standpoint. He found that if teachers were posted in places of their liking it had a positive influence on enrolment and retention of children.

An experimental study to check wastage was conducted by Shah (1983) in Bombay schools. He found that parents of the 60 per cent dropouts, though their duties were not of a regular nature, still stayed away from home all day. Ill-health of younger brothers or sisters, child labour and pre-engagement of children in household affairs were other factors. Stagnation was maximum in Grade I. An experiment, which had an impact on student behaviour, suggested that 11 am to 5 pm was the ideal school timing and that the activity method

was the most useful. Provision of midday meals (MDM) was another measure that improved the retention capacity of schools. The MDM programme of CARE, India (1977), was found to be effective in the state of Karnataka. Its effectiveness at the national level also was confirmed by Saxena and Mittal (1985).

Two studies were conducted on the effectiveness of the media and community involvement. Mohanty and Mohanty (1984) studied the effect of the SITE programme on attendance and enrolment in Orissa, and the NIEPA (1986) conducted an experiment under project ARISE to study the impact of community involvement on universalization. An analytical study was also conducted in this regard by Acharya (1984). He made an evaluation of education policy in India with special reference to the Andhra Pradesh Primary Education Act, 1961, and reviewed the implementation of the policy in Warangal district. He found that headmasters and teachers did show genuine interest in accelerating enrolment and retention and supported schools for girls but the attitude of the rural elite was not encouraging; there were no extension services and no inspectorate, and the census of children attending the school was not conducted effectively.

## IV. PUPIL ACHIEVEMENT AND DEVELOPMENT

Universalization is one problem of elementary education, another is the poor quality of such education as is provided. Admission of children to school at the primary level was not sufficient, in itself, to achieve the desired objectives. Despite schooling, the children remained educationally backward.

A break-up of studies on pupil achievement and development is given in Table 25.4

Table 25.4

STUDIES ON PUPIL ACHIEVEMENT AND DEVELOPMENT					
Aspects/Decades	50s	60s	70s	80s	Total
Backwardness	..	5	2	2	9
Test Construction	..	..	1	3	4
Correlates of Achievement	..	2	3	8	13
Development	..	..	4	4	8
<i>Total:</i>	..	7	10	17	34

Lohitakshan (1961) conducted an experimental study to determine the association of social environment factors with backwardness. Shah and Darji (1966) presented reports of their investigations identifying the academic causes of backwardness in mathematics, social studies and general attainment. Puranik (1969) studied academic backwardness in Nagpur schools. The SCERT, Andhra Pradesh (1976), investigated the causes of poor results of common examinations at seventh grade level. Sharma (1978) studied the academic progress of children in Sibsagar district of Assam and Desai (1985) investigated problems of learning among primary school children in Gujarat. Devi (1985) has analysed the barriers that exist in the school achievement of scheduled caste students. All these studies indicated that conditions in schools were far from satisfactory, the methods defective, teaching unplanned, textbooks inadequate, examinations subjective, teachers inefficient and parents non-supporting.

Any attempt to improve the quality of education requires reliable and valid procedures of assessment, especially of the diagnostic tests so that remedial measures can be taken. Sinha (1971) constructed a diagnostic test of concepts used in arithmetic at the upper primary level. Gadkari (1982) constructed a diagnostic test in general science for fifth grade children and Rao (1985) studied the nature and extent of reading disabilities. Besides these three diagnostic tests, Keskar (1981) developed a test of problem-solving ability in mathematics for children in the age group of 3-7. Achievement of children, however, depends also on several other factors. Thirteen researches have been conducted to study achievement in relation to relevant variables, bilingualism being the first to engage attention. Rao (1963) studied the achievement and adjustment of bilingual children in Madras and Chikramane (1967) studied this phenomenon in schools located on the border of Maharashtra and Karnataka.

Pre-school education is an important input for feeding primary education. Desai (1970), Sarma (1973), Muralidharan and Banerji (1974), Mohite (1981), Das and Garg (1985), and Lal (1986) investigated the effects of early admission to the pre-school system on school enrolment and their subsequent academic achievement.

Another academic variable of the study has been reading ability and its contribution to school achievement. Jain (1981) conducted a study on the impact of silent reading comprehension ability on achievement in various subjects. Socio-economic conditions and

related variables also play a significant role in success at school. Shukla (1984) studied students' achievement in relation to socio-economic status and size of the family. Deshpande (1985) conducted a specific study on language ability in relation to deprivation suffered by children at home.

The personality of the child affects his scholastic attainment. Mohanty (1985) studied the learning and personal adjustment of children in relation to their anxiety level. Sundersmita (undated) studied creativity, emotionality and self-concept of gifted average children through the projective technique of kinetic family drawings.

Cognitive and psychomotor abilities of children can be nurtured through primary school experiences. Chattopadhyaya (1971) investigated developmental problems relating to nine different aspects of common skills among nursery and primary school children of Warangal. Reddy (1971) investigated the development of causal thinking and concept of life among children in grades I-VI. Basu (1977) studied the development of concepts of weight, number and energy among urban and rural children in grades III-V. Arya (1981) also investigated the development of the concepts of weight, volume, classification and association among children in the age group 6-10. Manika (1983) investigated acquisition of concepts in mathematics in relation to personal and environmental variables. Rath (1972) studied the cognitive manifestations of certain caste groups—Brahmins, scheduled castes and scheduled tribes children. While the Brahmin children were consistently better in verbal abilities and concept formation, the tribal children were ambitious and vigilant. Banga (1980) investigated the cognitive processes of classification and seriation along with personality characteristics of boys and girls in English and Hindi medium schools of Jodhpur. Padhy (1986) studied the development of logical thinking ability and adjustment of school children.

## V. CURRICULUM DEVELOPMENT

Forty-three of the 208 studies under review related to curriculum development and its various aspects. Chronologically the trend has been one study during the 50s followed by two, eight and 35 during the 60s, 70s and 80s. Thematically, four studies relate to trends in curriculum development, 19 to improvement in school learning six are on the use of textbooks and three each on graded vocabulary, educational television and mis-

cellaneous curriculum programmes. Five studies relate to the concepts of hidden curriculum which include ethnicity, socio-economic status and teacher attitude. The break up of these studies is presented in Table 25.5.

Table 25.5

## STUDIES ON VARIOUS ASPECTS OF CURRICULUM DEVELOPMENT

Aspects	50s	60s	70s	80s	Total
Curriculum Trends	..	1	1	2	4
Improvement Studies	1	1	3	14	19
Textbooks	..	..	3	3	6
Graded Vocabulary	..	..	..	3	3
Educational Television	..	..	..	3	3
Hidden Curriculum	..	..	1	4	5
Misc. Programmes	..	..	..	3	3
<i>Total:</i>	1	2	8	32	43

## 5.1 Curriculum Trends

The earliest study on curriculum in elementary education in India was conducted by Chaudhary (1968). It was followed by a study by Shukla (1975) which investigated various aspects of curriculum development in Gujarat during the period 1940-70. It found inadequate curriculum concern at the schools level, lack of monitoring and evaluation as well as lack of involvement of teachers. Biswas (1986) studied the curriculum for the primary stage in Bangladesh. In India, the UNICEF-sponsored CAPE project has been undertaken to improve curriculum so as to provide to children access to primary education through the use of local-specific learning materials. Yadav and others (1986) conducted an evaluation of these programmes.

## 5.2 Quality Improvement Studies

Improving the quality of education is the major concern of curriculum projects. Sixteen studies have been made in this direction. These started at the initiative of the BMC (1957). It was found that child-centred teaching practices and correlated play activities influenced the quality of pupil attainment, attendance and discipline in class I. Chickermame (1964) conducted an experiment to evolve a teaching technique for children of single teacher schools which compared favourably with those of the multiple-teacher schools. Chokshi (1977) investigated the effects of psychological inputs in the

form of achievement motivation and other psychological traits on the academic performance of children. At the national level, a UNICEF project titled, Primary Education Curriculum Renewal (PECR) was undertaken by the NCERT in collaboration with different state education departments. The SCERT, Rajasthan (1979, 1982) studied the impact of the PECR project materials in Banswara district schools. Dave and others (1988) conducted a national-level survey and studied the effectiveness of PECR. Another UNESCO-APEID sponsored project was undertaken to improve the achievement level of primary school children in the states of Maharashtra, Tamil Nadu and Delhi where improvement was noticed in the teaching and learning of language, mathematics, science and environmental science. Singh (1987) reported that innovative methods of teaching were effective in developing active learning style and character among children. Teacher behaviour, supervisory practices by the inspectorate and parental attitudes also improved as a result of interventions of various types.

Specific studies in various subjects have also been conducted. The first was a language development project for pupils of grades III and IV by the BMC (1970). The two recent studies by Desai (1986) and Kachhia (1986) experimented with reading improvement programmes. Five programmes pertain to mathematics, science and environmental studies. Rajput, Saxena and Jadhao (1980), in an NCERT-financed project, studied the effect of the environmental approach in teaching science on environmental awareness of primary school children. In another project (1985), these investigators extended the use of the environmental approach to social sciences. Sharma (1978) conducted a study on teaching natural sciences. Pandey (1980) investigated the effect of programmed instruction on mathematics learning. Sastry (1982) investigated the effectiveness of the use of talking toys in teaching science, while the SCERT, Andhra Pradesh (1981), evaluated the UNICEF pilot project in teaching science and mathematics. Eshan (1985) conducted an evaluative study of the environmental education programme in Bangladesh primary schools. One study has also been conducted on the physical fitness of children. Moorthy (1981) conducted a survey of minimum muscular fitness of school children and compared the influence of yogic exercises and physical exercises on fitness.

## 5.3. Textbooks

Textbooks, as tools for curriculum transaction and improvement, have also been studied through research. The



MSBTPCR (1974) conducted a statistical survey on the use of textbooks in classes I to VII. Another survey on textbooks was conducted by Krishna Kumari and others (1980) on the use of mathematics textbooks in Haryana. Three studies have been evaluated in specific subjects in mathematics by Walvakar (1971); in Hindi by Chaudhary (1976); in environmental studies by the SCERT, Andhra Pradesh (1980) and one specific study has been conducted by Kurup (1984) who made linguistic and content analyses of Malayalam readers.

#### 5.4. *Specific Studies*

Curriculum development in general requires development of specific curricula in various areas. In the area of language learning, development of graded vocabulary is one aspect which has engaged attention of the researchers only recently. Gupta (1983) investigated basic Hindi vocabulary in Jammu & Kashmir; Bhanushali (1985) in Bombay; and Edke (1986) developed a graded vocabulary for grades I-IV.

Another area in curriculum development which has gained attention is the use of educational television (ETV). Seth (1983) studied the importance of ETV whereas Singh & Singh (1984) conducted two projects on the need, utilization and evaluation of ETV in Orissa. Three studies have been conducted on cocurricular aspects. The study by Sharma (1979) is on the scheme for health education in primary schools; another by Veeraswamy (1985), is on play festival programmes in elementary schools and the third by Kapur (1986), is on moral education. Besides these, studies in related curriculum areas were also undertaken. Das (1974) studied the importance of physical conditions and facilities on the attainment of children at primary stage.

#### 5.5. *Hidden Curriculum*

Hidden curriculum is one consideration in curriculum development which emerged during the second half of the current century. It refers to the psycho-sociological variables which contribute to the inter-personal relationship and personality development of the school-going population. Five studies pertain to this aspect. Rebecca (1976) studied the relationship of socialization to ethnicity. Kumar (1983) studied the spoken language ability of school children in relation to caste and class variables. Rathore (1985) investigated the effect of social structure of school and the creative inclination of students in relation to their dropout rate and mal-

adjustment. Puranik (1980) studied the effect of organizational climate and teacher morale on the social maturity of pupils. Dhondiyal (1984) investigated the effects of teacher expectation on the sociometric status of primary school children.

## VI. EVALUATION STUDIES

Only three studies have been conducted in the area of evaluation. The first was by Tiwari (1975) in which he studied the system of evaluation in upper primary schools and its problems. A new feature in evaluation is the non-detention of students in primary classes. The SCERT, Andhra Pradesh (1976) studied the impact of the non-detention policy. It was found that, while the students were free from fear of examinations they were not motivated for study. Their study habits were impaired and this policy adversely affected the children of the weaker sections. Another study by Sharma (1981) on this policy indicated that non-detention contributed towards reduction of educational wastage to some extent at the primary and secondary stages in Andhra Pradesh.

## VII. SCHOOL SYSTEMS

Twelve studies on formal school systems have been reported with one study each conducted during the 50s and 60s; six during the 70s and four during the 80s. Due to diversity of conditions in our country it is but natural that we have schools operating under different settings, namely, single and double shifts, residential (tribal ashram schools) and non-residential, day schools and night schools, and aided and unaided schools. Obviously, the studies reviewed in this section have a bearing on some of these settings.

Tannu (1959), who studied the shift system of Bombay primary schools, reported reduced instructional hours—three hours as compared to the normal five hours; poor pupil attendance; and promotions not based on merit. There are four studies on single-teacher schools. Chickeramane (1964) examined the working of single-teacher schools and evolved methods of work for them; the SIE, Assam (1968) conducted case studies of single-teacher schools of Jorhat sub-division and Joshi (1973) made a factual analysis of the purposes, functions and problems of one-teacher schools of western Maharashtra. In another NCERT-financed project,

Mali (1984) studied 98 single-teacher schools and found that only 80 schools were in usable condition where only nine teachers had copy of the syllabus. They were not able to prepare a common time table. Supervision was non-existent. Out of 819 boys and 368 girls in class I, only 227 boys and 45 girls completed class IV in four years. While 71.3 per cent of the students passed class I, the rest dropped out. The study tried out the ungraded model and identified a variety of methods, viz., individual group instruction, graded teaching and the self-study method. Thakur (1973), in a study of ten model schools (set up by the SIE, Assam), selected from Dibrugarh and Sibsagar districts, concluded that the schools could not make significant improvement in academic attainment because of the location of the schools and also because their teacher-training programme was defective. The SCERT, Andhra Pradesh evaluated the functioning of the night primary schools of six districts where the facilities of the day schools were used. The children came from poor SES conditions and their performance was generally poor. There were no incentives for the children and teachers. Also there was no scope for games and other activities. Pratap and Raju (1973) reviewed the functioning of 31 aided schools. A majority of the schools were not functioning satisfactorily due to lack of interest on the part of the functionaries (teachers, managers, and also because their human and material inputs were inadequate. Krishna Rao (1986) reported a case study of seven tribal schools run by the TCRTI, Hyderabad. In addition there were three studies on ashram schools which are run by tribal authorities. Pratap, Raju & Rao (1971), in their study of six ashram schools, found that the average percentage of absenteeism was 31.60, the stagnation index was 38.31, and the curriculum was almost identical to that of other primary schools. Bose (1982), on study of a sample of ashram schools selected from three districts of Bihar, found that these schools did not fulfil the objectives for which they were established and were not different from the general elementary schools. However, Desai and Patel (1981) in their study of 22 ashram schools, found that these schools induced regularity in village school and also observed their impact on the people in terms of their awareness about education, profession and social and political roles. That physical conditions (facilities) have an impact upon efficiency in education was confirmed in a study on 380 primary schools of Sibsagar district of Assam by Das (1974).

### VIII. TEACHERS AND TEACHER TRAINING

Eleven studies are reported on teachers and their training. All these have been conducted during the last three decades. Studies on teachers as professionals have a focus on their SES conditions, qualifications, personality characteristics, involvement in their jobs, place and importance of teaching as an occupation, needs, problems and their working conditions, especially of women teachers. Studies on teacher training deal with plans and programmes of teacher training institutions in certain states (Bihar, Gujarat, Maharashtra, Madhya Pradesh) and also the input-output relationship in the case of teacher-training institutions of Punjab state.

A survey study conducted twenty years ago by the BMC (1966), besides identifying the professional needs and physical facilities for teachers, sought reorientation of the educational systems at all levels and a complete change in the outlook of the society from pursuing wealth and affluence to seeking the right human values. Studies by Paranjape (1970) conducted in Maharashtra and by Thakur (1978) conducted in Assam deal with problems, difficulties and working conditions of teachers. Women teachers of Maharashtra found it difficult to play their dual role (home-making, job), but the teachers of Assam felt that they were able to play their dual role successfully. However, they faced many problems and difficulties in this regard. Two studies, one by Agrawal (1969) and the other by Bose, Banerji and Mukherji (1972), have studied the teaching competence, intelligence level, academic qualifications, liking for teaching profession and the average time which a teacher devotes daily to teaching. Roy (1975), who conducted a sociological survey of primary teachers, found that more women were attracted to teaching as this occupation gave them more social prestige though opportunities for promotion are lacking. MSBTPCR (1974) made a study of the background of mathematics and science teachers and studied their opinions regarding the syllabus introduced in 1974. The study revealed lack of adequate professional background of science and mathematics teachers and also that they did not favour teaching of new mathematics. Gupta (1981) studied job involvement and need pattern of primary school teachers. Teaching in rural and urban areas was studied in relation to teaching effectiveness. Naik (1981) made a comprehensive survey of teachers working in primary schools of Pune. A larger proportion of teachers taught all the subjects in aided schools than did so in corporation schools.

In his study, Tripathi (1964) pointed out several weaknesses in the programmes of Basic Teacher Training Institutions (BTIs), in such areas as enrolment, curriculum techniques of teaching crafts (work experience), methods of teaching various subjects, administration and integration among the various subjects included in the curriculum. The SIE, Gujarat (1969), on the basis of a survey of 70 primary teacher training institutions, found both similarity (course, evaluation) and diversity (system for practice lessons) and suggested upgradation of laboratories and libraries. Gupta (1982), in a correlational study of the BTIs in Punjab found a significant correlation between various inputs (quality of teacher educators, student teachers' motivation, teachers' morale, leadership style) and outputs (performance in examination). Eight predictor variables of teaching performance were identified. Gogate, in a recent study (1983), has analysed training of primary teachers in the context of universalization of primary education.

### IX. ECONOMICS

Misra (1959) made a comprehensive analysis of educational finance in India for 1698 to 1959 which also included elementary education. Mathur (1968) found that educational expenditure rose by 20 per cent during 1951-61; per head expenditure on education rose by 144 per cent and per pupil expenditure increased from Rs 44 to Rs 72. Among institutions, the annual rate of growth of direct expenditure in respect of primary education was 7.2 per cent. These studies cover a wide spectrum of the educational sector.

There are two specific studies on the cost of elementary education. Bose (1976) determined the components and differentials of unit cost of elementary education for the state of West Bengal. The average recurring

per pupil cost for the whole state was Rs 62 and Rs 60 among schools in Calcutta during 1972-73. Dandavate (1986) dealt with the cost of primary education in the Greater Bombay area during 1960-80.

### X. RESEARCH NEEDS

Only one study by Dunakhe (1984) has identified research needs in primary education through documentary analysis of research surveys and an encyclopaedia of educational research. Questionnaires were also sent to 194 educational personnel who were found to be well aware of their needs of research in primary education. The specific research needs identified included in-depth studies on absenteeism, ability grouping, curriculum development practices, educational policy, parents' education, school entrance, and transport systems for school children.

As can be seen, a good number of these researches are status studies conducted through surveys. Longitudinal and cross-sectional techniques and also Piagetian methodology have been used in very few studies. As for themes, barring a few areas like curriculum development and single-teacher schools, they are mostly traditional. Very few researches are on educational and psychological development of children under existing socio-economic conditions. All these aspects and also the priority areas identified by NPE-1986 suggest that future researches in this area should centre on: Barriers in the Education of Women, Minorities, SCs, STs and Disabled Children; Learner-centred Strategies; Minimum Learning Outcomes-Scholastic and Non-scholastic; Continuous Evaluation and Diagnostic Testing; School Readiness for Universalization; Remedial Programmes; Effectiveness of Voluntary Bodies and Centrally Sponsored Projects; and District, Village and Taluka Level Studies.

**ABSTRACTS: 1439—1481**

1439. ACHARYA, A.A., *Compulsory Primary Education in Andhra Pradesh: A Policy Analysis*, Ph.D. Edu., Osm. U., 1984

The objectives of the study were (i) to overview the evolution of educational policy and its implementation in India till the advent of independence, (ii) to analyse the objectives for which article 45 of the Constitution was framed and the background in which the Andhra Pradesh Primary Education Act came into force, (iii) to review the working of the compulsory primary education programme in Andhra as implemented in Warangal district in the light of provisions of the Andhra Pradesh Act, of 1961, and (iv) to evaluate the impact of the policy especially on weaker sections in the rural areas over a period.

The study involved a case study of the district Warangal where compulsory education was implemented. In addition to this, various records concerned with implementation and institution of the policy in vogue were also studied. Further, a random sample of 25 executive officials and 175 teachers and headmasters working in 100 schools of the district were chosen as sample for the study. In all 100 parents of the children of the sample schools were taken randomly. The sample subjects were interviewed to ascertain their experiences, views and suggestions regarding the implementation of the policy.

The findings of the study were: 1. The period immediately after the close of the Second World War was one in which no serious long-term policy measures relating to education in general and elementary education in particular could be contemplated. 2. With the return to power of the Indian National Congress a conspicuous change was noticed in the primary education programme. 3. In view of the constitutional directive to provide education to all children 6–14 years of age, the mid-day meals programme had become a boon to the poor children of the areas. It helped to a considerable extent in the increase of enrolment and retention of students of weaker section in schools. 4. The majority of the executives, headmasters and teachers did not have clear knowledge of the legal provisions of the policy. Only a few could mention some of the provisions vaguely. 5. Important provisions like preparing schemes, making declarations, enumerating the school going children, and enrolling them in schools were not effectively

followed. 6. The entire state was taken as the specified area for implementation of the compulsory education scheme and all schools under different managements were treated as approved schools. 7. There was only one special school in the Warangal district for physically and mentally disabled children but no serious effort was being made to enrol all such children. 8. Except those who sought admission themselves no serious and sincere effort was made to enrol all children of the village. 9. The extension officer and deputy inspector of schools had not insisted on regular enumeration, enrolment, attendance and retention of children in schools for the last ten years; they confined themselves to advising the headmasters during school inspection. 10. Different processes of the legislation like taking penal action, issuing notice, conducting enquiry, passing attendance orders, prosecution in a court of law, etc., were not followed at all. 11. Headmasters and teachers did not show personal interest in accelerating enrolment and retention of children. 12. People preferred separate schools for girls, at least special amenities for girls in mixed schools to attract more girls. 13. There was agreement between teachers, executives and parents with regard to causes of poor enrolment and dropouts. 14. The role of the rural elite and village people in the compulsory education programme, in providing all required provisions for universal education was not encouraging.

1440. ACHARYYA, S.C., *Preprimary and Primary Education in Tripura and Cachar, Development and Problems*, Ph.D. Edu., Gau. U., 1984

The main objective of the study was to evaluate the progress made in the field of preprimary and primary education in Tripura and Cachar with particular reference to plan periods (up to the Fifth Five Year Plan).

The study was historical, analytical and comparative in nature. To find out the development of preprimary education in Tripura and Cachar a brief review of the development of preprimary education in the world and in India was attempted. This was followed by an analytical discussion of the growth of preprimary education during the successive plan periods in Tripura and Cachar. Similarly, to examine the growth of primary education the history of the growth of primary education in India, Assam, Cachar and in Tripura was reviewed. Finally, a comparative assessment of the progress of preprimary and primary education in Tripura and Cachar was made. Materials were collected from a wide

variety of sources by diverse means such as interview, questionnaire field study and personal contact with educational administrators, inspecting officials, teachers, guardians, parents, students, social workers, presidents and members of the gram panchayats and the like. Information was also collected from relevant records, literature, etc. In order to maintain the representative nature of the data collected by survey, they were compared with relevant available records and confirmed by information obtained from official and non-official respondents.

The study mainly revealed: 1. As a result of the introduction of different schemes and due to the provision of increasing outlay in successive plan periods, there had been rapid expansion of preprimary and primary education in Tripura and Cachar in all the major sectors such as the number of schools, teachers and children. The scope of teachers' training and administrative machinery was enlarged. 2. During the first 20 years of independence the progress was most remarkable. In Tripura in 1947, 8 per cent of the children of school-going age attended schools and 20 years later the percentage had increased to 86 per cent and was expected to be 96 per cent in 1978-79. 3. The total number of primary schools, excluding the attached sections, rose in Tripura to 1531 in 1976-77, against 404 in 1950-51. 4. Similar developments took place, particularly in the field of primary education, in Cachar. This growth took place more as a result of opening of new schools than through the expansion of existing one. 5. This rapid quantitative expansion had given rise to a number of problems. Some of the important problems of primary education in Tripura and Cachar were inadequacy of teaching staff, problems of physical plants, problems of single-teacher schools, lack of properly qualified and trained teachers, lack of incentives in the schools, absence of adequate school-community relations, problems of accommodation for teachers, weak supervision and administration of primary education, working of the basic schools on non-basic lines and acute problems of wastage of primary education arising out of dropouts and stagnation. 6. The availability of textbooks in Tripura and Cachar left much scope for improvement. 7. There was no uniformity in respect of period of schooling in the primary stage of education in Tripura and Cachar. 8. The proportion of school-going children of the backward classes and tribal communities was relatively low. Universal primary education has remained a goal yet to be achieved.

**1441.** BANGA, S., *Cognitive Processes and Personality Characteristics of Primary School Children*, Ph.D. Edu., Raj. U., 1980

The objectives of the inquiry were (i) to make a study of cognitive process, viz., perception, reasoning and learning of primary school children studying in different types of schools, (ii) to make a study of their personality characteristics, (iii) to make a comparative study of these assessed variables of school-children of English-medium and Hindi-medium schools, and (iv) to make a comparative study of the cognitive functioning and personality characteristics of boys and girls of different schools.

The sample was selected from class V students of primary schools located in Jodhpur city of Rajasthan State. All the students studying in English-medium and Hindi-medium schools were administered the Draw-a-Man Test and then boys and girls were selected for the sample on the basis of I-Q. In this way a sample of 200 boys and 200 girls was selected after selecting an equal number of each type of school, viz., English-medium, Hindi-medium, voluntary and government. The data were collected with the help of following tools; (i) the Phatak Draw-a-Man Test of Intelligence (1966); (ii) the Gupta Perceptual Speed Test (1970) with split-half reliability of 0.88; (iii) the Banga Test of Reasoning (1976) having split-half reliability of 0.88 and concurrent validity 0.69; (iv) the Cattell Culture Fair Intelligence Test (1957); (v) the Kulshreshtha Letter-Digit Substitution Test (1960); and (vi) the Cattell Children Personality Questionnaire (1972).

The findings of the study were: 1. Boys studying in English-medium central schools displayed good perception, good reasoning ability to classify things, ability to arrange things in series and had good learning capacity. The girls studying in these English-medium schools also displayed similar characteristics but were lower than boys. 2. Boys studying in English-medium voluntary schools showed good perception, reasoning ability and ability to classify articles. But the learning capacity shown by these boys was lower than that of boys of central schools. The girls studying in these voluntary English-medium schools showed good perceptual speed, reasoning ability, ability to put articles in series, classify articles and to infer relation. Their learning speed was lower than that of the girls of central schools. But their perceptual speed was highest in all the groups of boys and girls. 3. Boys studying in Hindi-medium government schools had the poorest perception, poor

ability to put articles in series, classify the things and infer relations. They had also shown the lowest learning capacity and speed among boys groups. The girls of Hindi-medium government schools also showed poorest perceptual speed and reasoning ability among girls groups. But they successfully displayed the ability to place articles in series. The learning ability displayed by them was also quite low and was close to that of boys studying in government schools. 4. The boys studying in Hindi-medium private schools displayed good perceptual speed but not better than that of boys of English-medium schools. But in the ability to put articles in series and to classify them they were very near to the boys of English-medium schools. The perceptual speed of the girls studying in Hindi-medium voluntary schools was good and close to that of the girls of English-medium schools. They showed low capacity to put articles in series but good ability to classify articles. The learning capacity displayed by these girls was not equal to that of the girls of English-medium schools. 5. The boys studying in English-medium central schools were found to be reserved, uncompromising, emotionally less stable, changing their attitudes, excitable, overactive and unrestrained, aggressive, toughminded, uncontrolled and careless of social rules. They were also tense and frustrated. The girls studying in these English-medium central schools were outgoing, cooperative, emotionally stable, enthusiastic, tenderminded, restrained, forthright, and tense. 6. The boys studying in English-medium voluntary schools were reserved, uncompromising, excitable, assertive, independent and creative having timid personality, realistic, uncontrolled and careless of social roles. The girls studying in these English-medium voluntary schools were emotionally stable, phlegmatic, obedient, considerate about others, sober, slow in activity, realistic, forthright, placid and relaxed. 7. The boys studying in Hindi-medium government schools were outgoing, impulsive, emotionally stable, excitable, overactive, adventurous, socially bold, tenderminded, uncontrolled, tense and frustrated. The girls studying in these Hindi-medium government schools were emotionally less stable, excitable, assertive, strong-headed, independent, creative, tenderminded, shrewd and polished, tense, having weak ego and frustrated. 8. The boys of Hindi-medium voluntary schools were emotionally stable, phlegmatic, considerate about others, adventurous, tenderminded, imaginative, controlled, socially precise and relaxed. The girls of these Hindi medium voluntary schools were emotionally less stable, obedient, submissive, considerate about others, sober, tenderminded, forthright, placid, relaxed and unconcerned about criticism by others.

1442. BARUA, A.P., *Wastage in Sibsagar and Golaghat Sub-divisions—A Comparative Study*, SIE, Assam, 1971

The major objective of the study was to compare the wastage and stagnation at the primary stage during a period of five years of pupils' schooling in the sub-divisions of Sibsagar and Golaghat and to find out local factors affecting the wastage and stagnation of a particular place.

A 20 per cent systematic random sample was drawn which included 113 schools with 2342 pupils (1310 boys and 1032 girls) from Golaghat sub-division and 151 schools with 2872 pupils (1571 boys and 1301 girls) from Sibsagar sub-division. The sample included all types of schools. Comparison of the enrolment of class A in 1964 with the number of pupils passing the School Leaving Certificate Examination after five years from the date of their admission was made. Data regarding causes of wastage and stagnation were collected from the teachers of both the sub-divisions.

The major findings were: 1. For Golaghat, the percentage of boys and girls regularly reaching class III was 20.38 and 20.54, and for Sibsagar, the percentage was 30.87 and 31.59 respectively. 2. The wastage at primary stage for boys and girls in Golaghat sub-division was 80.38 and 78.39 per cent respectively. In all 79.50 per cent of pupils failed to complete the course in the stipulated time. In Sibsagar sub-division, the wastage for boys and girls was 70.08 and 69.02 per cent respectively, and in all 69.60 per cent of the pupils failed to complete the course regularly. 3. The level of educational wastage was affected by three factors, viz., dropouts and stagnated and transfer cases. The effect of transfer cases was comparatively small; stagnation in classes was of much more importance. Wastage was not uniform throughout the five years of the primary stage. It was maximum at the first year of schooling. The wastage in the sampled schools was 76.70 per cent for boys and girls together. Stagnation and dropout cases independently were higher in Golaghat sub-division than in Sibsagar. 4. The proportion of stagnation to dropout in Golaghat was four whereas in Sibsagar it was five. A higher proportion of grade repeaters indicated parents' consciousness towards their children's education. Sibsagar had a higher proportion in this regard, indicating a better educational environment and educationally conscious guardians. 5. Poverty, ignorance of parents, poor health of pupils, repeated failure, bad physical condition of the school, long absence from the school,

bad family environment, attendance in social festivals, pupil's attitude towards education, rough and unsympathetic behaviour of teachers, multiple class teaching, overcrowded classes, single-teacher schools, faulty admission policy, etc., were the main causes of wastage. More or less the causes of wastage and stagnation were similar and sometimes the same. Repeated failure in a class was perhaps the only cause of wastage independent of stagnation. One important cause of stagnation was the pupils' attitude towards examinations. Lack of teaching aids contributed towards failure of a pupil. Under-aged for the class, lack of the reading habit, no room for study at home, irregular attendance due to bad communication, etc. were other causes. No special local factor was found to affect the wastage and stagnation in both the sub-divisions.

1443. BISWAS, N.B., *A Study of the Curriculum for Primary Education in Bangladesh*, Ph.D. Edu., MSU., 1986

The major objectives of the study were (i) to evaluate the primary education curriculum in Bangladesh in terms of its objectives and the criteria mentioned by the National Curriculum and Syllabus Committee of Bangladesh, (ii) to conduct a status survey of primary schools with regard to instructional inputs and other facilities, (iii) to study the assessment system, and (iv) to study the problems involved in implementing the curriculum.

The evaluation model included the assessment of objectives, content, implementation and assessment procedures of the curriculum. The sample of textbooks included in the study were textbooks in mother-tongue (Bengalee), mathematics and environmental studies. The sample respondents were 478 teachers from 100 schools of the Dhaka division of Bangladesh. The tools used for the study were check-lists, questionnaires, interview schedules, and schools and information blanks. They were prepared by the investigator. The data were collected by the investigator through personal visits to schools and study of relevant records. Descriptive statistical techniques and a qualitative mode of analysis were used for analysis of data.

The major findings of the study were: 1. A contextual gap existed between the framing of objectives by the National Education Commission and the National Curriculum and Syllabus Committee. 2. There was some gap between the curricular content recommended by

the National Education Commission and that of the National Curriculum and Syllabus Committee. 3. Eventhough the National Curriculum and Syllabus Committee recommended inclusion of environmental sciences, the National Education Commission did not recommend adopting such studies. 4. The textbooks were mostly according to the contents included in the syllabus prescribed by the National Curriculum and Syllabus Committee. 5. The textbooks were very poor with regard to physical aspects. 6. The teachers' hand books were of high quality in terms of both content and production. 7. The schools did not implement the curriculum appropriately. 8. The questions set in the examinations were of the knowledge type and ignored other aspects like analytical thinking, logical reasoning, etc. 9. The problems were related to lack of physical facilities time-table, nonavailability of appropriate teaching aids and materials. The work-load was very high as perceived by the teachers.

1444. Das, R.C., *A Comparative Study of Educational Wastage in Urban and Rural Areas*, SIE, Assam, 1975

The major objective of the investigation was to find out the variation of educational wastage with regard to its extent at the primary education level in urban and rural areas in one of the districts in the plains of Assam.

The study covered 761 schools out of which 743 were located in rural area and 18 in urban areas in the Jorhat subdivision of Sibsagar district. These did not include the 19 suburban area schools which were studied separately for comparison. Altogether, 13,730 pupils were covered in the rural area and 609 in the urban area. The number of pupils covered in the suburban area was 431. The rate of wastage (dropout) and stagnation (grade repetition) expressed as percentage of the initial cohort were ascertained by following the 'True-cohort' method, which was followed separately for the groups of pupils in urban, suburban and rural areas.

The major findings were: 1. The wastage (dropout) rates for urban, suburban and rural areas were 15.1, 7.0 and 14.5 per cent respectively, while the stagnation (grade repetition) rates were 48.1, 63.8 and 63.4 per cent respectively. The total educational wastage was 63.2, 70.8 and 77.9 per cent respectively for urban, suburban and rural areas. 2. The combined wastage and stagnation in rural area schools was significantly higher than that in the suburban area schools which was in turn

significantly higher than that in the urban area. The same trend existed for boys and girls separately also. 3. The percentage of pupils regularly completing the primary course was highest in the suburban area compared to urban and rural areas. Wastage was lowest (7.0 per cent) in suburban area schools. But in the case of stagnation (failure in examinations) the rate was lowest for urban area (48.1 per cent). In rural areas wastage in case of girls was lower than that in case of boys whereas it was almost the same for boys and girls in urban and suburban areas. But in the case of stagnation, the percentage was lower for girls in urban area but higher in both the suburban and rural areas in comparison with boys.

**1445.** DAS, R.C., *A Study of the Wastage and Stagnation at the Elementary Level of Education in the State of Assam with special reference to the Primary Stage*, SIE, Assam, 1969

The main aim of the project was to study wastage and stagnation at the elementary level of education in the state of Assam with special reference to the primary stage.

The incidence and rate of wastage and stagnation at the primary level of education in Assam from the global enrolment figures were calculated. The global enrolment cohort method was used with slight modification. Gradewise global enrolment figures from the year 1951-52 through 1966-67 were used. In this period, there were 11 enrolment cohorts, each followed for five years. The base years were from 1951-52 to 1961-62. The total enrolment in class A in each of the base years formed a cohort of pupils to be followed till class III. The term 'wastagnation' was used to mean wastage and stagnation combined. The extent of wastagnation was computed against each base year both in absolute values as well as in percentages and the weighted averages of the 11 years was taken as the mean value of wastagnation for the period of study. Primary wastagnation was compared with the middle and the elementary level wastagnation. The causes of wastage and stagnation and their relative importance were discussed. Analysis variance was used to draw conclusions.

Some of the major findings were : 1. The rate of wastagnation at the primary stage was high. The variation in the rate of wastagnation among various classes was significant but the variation among years was not significant. 2. In spite of a rapid increase in educational expenditure, efforts and facilities, the rate of

wastagnation remained constant. 3. There had been a tremendous expansion of primary education during the post-independence period and it was still continuing. The rate of wastagnation at the primary level was higher among girls than that of boys. 4. The mean rate of wastagnation at the middle stage up to class VI was 9.96 per cent whereas up to class VII it was 38.45 per cent. Corresponding figures for boys and girls were 10.36 and 36.65 and 8.69 and 43.41 per cent respectively. The rate of wastagnation in class VI for pupils was 28.49 per cent, for boys 26.29 per cent and for girls it was 34.72 per cent. 5. The total rate of wastagnation from class IV to VI was 9.96 per cent. A large percentage of pupils left schools after class VI and there were various reasons for this. The rates of wastagnation at the primary level was much greater than that in the middle level. 6. The average rates of wastagnation were 77.12 per cent at primary and 38.45 per cent at middle level for pupils in general. 7. The total rate of wastagnation for pupils at the elementary level as a whole lay between 80.56 and 86.31 per cent. 8. The rate of wastagnation among girls was higher than that for boys.

**1446.** DAS, R.C., *Administration of Elementary Education in relation to the Programme of Universalisation*, SIE, Assam, 1979

The main aim of the research was to study the position of administration of elementary education in relation to the programme of universalization in Assam.

Data were collected from the field as well as all concerned agencies. The position of administration of elementary education at higher levels was also studied and its functioning at these levels was observed. The secondary data collected at these levels were analysed; opinions, remarks and reactions of various functionaries at higher levels of the administrative machineries were noted. On the basis of such experience as well as study of primary and secondary data, findings on the present position of administration of elementary education in relation to universalization from village level to the state level in Assam were drawn.

The study mainly revealed that the area of administration of education at the elementary level was full of problems. The Directorate of Elementary Education was a newly created department and was yet to be fully strengthened. In comparison with the tremendous expansion of elementary education, the expansion of the machinery relating to administration, inspection, supervi-



sion and management was inadequate. The state had 21559 primary schools, 3816 middle-level schools, 45387 primary school teachers, 20296 middle-level teachers, more than 22 lakh school children, 25 deputy inspectors, 16 additional deputy inspectors and 219 sub-inspectors and 62 assistant sub-inspectors of schools. The administrative machinery was not adequate even for administration at the current status of elementary education, let alone the expansion during the Sixth Five Year Plan for universalization. Recommendations indicated the suggested additional machinery needed for achieving universalization. From all points of view, new recruitments of administrative personnel should be made from professional institutions.

**1447.** DAS, R.C., *Impact of School Conditions on Primary Education*, SIE, Assam, 1974

The purpose of the study was to ascertain whether there was any impact of the physical conditions (facilities) of the primary school on the retentivity and regular educational progress of its children.

Data were collected from a representative sample of 380 primary schools in Sibsagar district. These schools constituted about 15 per cent of the school population in the district. The sample included a proportionate representation of schools in urban and rural areas. The relationship between physical facilities in schools and the deficiency in education was determined by computing the product-moment correlation coefficient. Association between physical facilities and wastage in education was also tested by applying the chi-square test.

The study revealed that there was significant relationship between efficiency in education and physical facilities in schools. The school conditions definitely seemed to have a favourable impact on school education. Better physical facilities increased the attractive and retentive power of the school as well as provided situations conducive for effective education and, hence, contributed towards better education of the children of that school.

The significant educational implication is the better provision of physical facilities in schools helps in reducing wastage in education and in increasing its educational efficiency.

**1448.** DASS, J.R. and GARG, V.P., *Impact of Pre-primary Education on Drop-out, Stagnation and Academic Performance*, Education Department, Municipal Corporation, Delhi, 1985

The major objectives of the study were to find out the impact of nursery education on, (i) retention, (ii) stagnation, (iii) academic achievement, and (iv) development of personality through co-curricular activities. The hypothesis examined was: Pre-primary education does not affect stagnation incidence of dropouts, or educational achievement in any way. The study was carried out in 18 schools of the Delhi Municipal Corporation. Nine schools had nursery classes and nine were without nursery classes.

For the study of dropout, the total number of students covered were 10,082 from schools with nursery sections and 4790 from schools without nursery sections. About 103,006 students formed the sample to study stagnation. Of these, 5484 students were from schools with nursery sections. To study the impact of pre-school education on educational achievement, the sample consisted of 798 class V students from schools with nursery sections and 769 students from schools without nursery sections. Pro-formas were developed for collection of different data.

The study revealed: 1. Early childhood education had a salutary effect in reducing the dropout rate. The group which had pre-school education had shown improvement in retention over the other group. 2. Lower stagnation was observed in the case of the group which had pre-school education. 3. Children who had attended pre-primary classes before joining primary class, achieved slightly higher in class V than children who did not take pre-primary education. 4. No scientific inference could be drawn about the impact of pre-primary education on achievements in the field of co-curricular activities.

The main implication of the study was that pre-primary education should be encouraged as one of the remedies to deal with the problems of wastage and stagnation.

**1449.** DAVE, P.N., et al., *Pupil Achievement at the Primary Stage*, Dept. of Pre-school and Elementary Education, NCERT, 1988

In 1975, at the instance of the GOI, a number of innovative projects were launched in the country with UNICEF assistance. They were planned and implemented in the states/UTs which agreed to participate in these national-level efforts to improve pre-school and primary education under the technical guidance and support of the NCERT. The NCERT acted as a moni-

toring and evaluation agency as well as a liaison agency between the states/UTs on the one hand and the MOE/UNICEF on the other. Primary Education Curriculum Renewal (PECR) was one of these projects.

This project was initiated in 1975 with the participation of 15 states/UTs wherein 30 schools each were selected as project schools. During the second phase, starting in 1979, it was expanded to all the states/UTs except Arunachal Pradesh. During 1980-84, about 2480 schools covering approximately three lakh children were involved in the experiment. About 1100 teachers and 180 teacher-educators were also associated with the experiment. This project was evaluated.

The main objectives of the project evaluation were, (i) to study enrolment, retention and stagnation in the project schools, (ii) to ascertain the extent to which the minimum learning outcomes (competencies) were developed in the pupils of the project schools exposed to the PECR package of materials in comparison with those who were not, and (iii) to investigate the relationship of pupil factors, school factors and socio-cultural factors to pupil achievement in terms of minimum learning outcomes (competencies) with regard to language, mathematics and environmental studies.

The overall results were: 1. Certain antecedent variables were significantly related to achievement of pupils at the primary stage, although their contributions to the predictive relationship varied. 2. The specific variable—Project and Non-project—was related to achievement in all subjects except to achievement in language in Class I. 3. Achievement of the children in language was found to be excellent in Class I, good in Class II, better than minimum in Class III and minimum in Class IV. 4. Achievement of pupils in mathematics was found to be excellent in Class I & II, good in Class III and poor in Class IV. 5. Achievement of pupils in environmental studies was found to be more than excellent in Class I and II. 6. Achievement of pupils in science was found to be slightly less than good in Class III and poor in Class IV. 7. Achievement of pupils in social sciences was slightly less than good in Class III and a bit below minimum in Class IV. 8. The data indicated that there was a sudden slump in achievement of children in all subjects as they entered Class III, which continued through Class IV. 9. The project means were greater than the non-project means except in respect of language in Class I, and the lowest project mean was not less than the minimum percentage marks of 35. It was concluded that it was possible to raise the attainment level of children with the help of the better transaction programmes like

primary education curriculum renewal. 10. It was evident from the data that achievement means in respect of subjects varied from state/UT to state/UT. It was also true that, at times, achievement means of pupils from Class I to IV within a state/UT were not consistent.

1450. Desai K.G., *Learning Disabilities of Primary School Children*, Dept. of Education, Guj. U., 1985 (NCERT financed)

The main objectives of the investigation were (i) to study different types of learning disabilities commonly found in grade IV (primary schools) children in Ahmedabad city, (ii) to investigate their probable causes, and (iii) to devise and try out remedies for correcting those learning disabilities. The hypotheses tested were: (1) Parental disregard of the studies of their children is a major factor affecting disabilities in learning. (2) Apathy of teachers for certain children destroys their incentive to learn. (3) Low intelligence of some pupils is the cause of disability of learning language and arithmetic.

Three private schools and three municipal schools from the Navrangpura area and one class of grade IV from each of the six schools were selected. Goodenough's Draw-a-Man test, adapted by Phatak, was administered to 272 children of six classes. Diagnostic tests in language and arithmetic were prepared and administered. It was found that 75 per cent of the pupils showed deficient achievement in language and arithmetic. The tests were revised and the levels of achievement were lowered for passing so that cases of learning disabilities would be reduced. From this sample, seven groups, viz., the normal control group (N=25), the learning disability group (N=10), and five learning disability experimental groups, each one consisting of 20 pupils were formed. The average IQ of all the six learning disability groups was 100 while that of the normal control group was 115. In order to examine the oral expression of the pupils in language, each child was made to tell a story to the class. The remedial programme was administered for one month. The same test that was used as pretest was again administered to all the seven groups. Interviews of teachers and parents were held. ANOVA was applied to analyse the data collected.

Major findings were: 1. The most potent cause of learning disability was poverty. 2. The second cause of the malady was the apathy of teachers to their duties in

school. 3. The third cause of learning disability was the abolition of examinations from standards I and II in the schools of Gujarat. 4. Low intelligence was also one cause of the malady.

1451. DEVI, K.G., *Problem of Dropouts in Primary Schools of Manipur with special reference to Imphal Town (1963-1970)*, Ph.D. Edu., Gau. U., 1983

The specific objectives of the study were (i) to ascertain accurately the extent and nature of dropout in the primary course of education in Manipur, (ii) to ascertain accurately the incidence of dropout at the primary stage of education at Imphal town as well as in Manipur, (iii) to study variations in the magnitude of the problem under various situations, (iv) to identify the causes and their relative importance, and (v) to suggest feasible remedial measures in the light of the findings.

The approach was historical, experimental and analytical. The study was based on original sources. The career of 54497 and 2927 fresh entrants in class A in 1961 had been followed upto class VIII in 1970 in Manipur and Imphal town respectively. For the field survey, two dropouts and two stay-ins from each of the 133 sample schools of Imphal town, their parents and guardians, heads and the teachers of sample schools, teacher educators and inspecting staff were interviewed. The sample schools represented various strata. A School Information Blank, Information Sheets for dropouts and stay-ins, Interview Schedules for dropouts, stay-ins, dropouts' parents and guardians, stay-ins' parents, guardians and teachers and a five-point scale opinionnaire were developed and used. The cohort method was followed to test variation in the incidence of dropout. The grade-wise and year-wise variations were examined with the analysis of variance techniques. F-ratios were calculated to test the significance of the variations. The incidence of dropout, rate of dropout and stagnation and average rate of dropout were determined. Causes of dropouts were hypothetically tested under school, pupil and family variables. Concomitant relationships between the rate of dropout and physical facilities in schools and other variables were ascertained by computing rank correlations. Chi-square test and t-test were used for testing the significance of the difference between dropouts and stay-ins on certain pupil and family variables, as judged by three sets of judges. Common agreement among three sets of judges for the causes of dropout was ascertained by calculating the concor-

dance coefficient. The percentage of the causes of dropout was graded as responded by dropouts, their parents and teachers. The relative importance of the causes of dropout as given by head teachers, inspecting officers and teacher educators was studied.

Some of the major conclusions were: 1. There was no uniformity in the rate of dropout for the whole primary course. At the lower primary course, girls dropped out more than the boys. The difference in rate between boys and girls was 14.76 per cent, which was highly significant. In the middle-school course the difference was not significant. 2. As a whole, girls had a higher rate of dropout than boys. The difference between the mean rate of dropout of boys and girls was 6.30. 3. The boys had a higher rate of stagnation than the girls. 4. The highest rate of stagnation following the cohort was at the junior high school stage. Class-wise stagnation was clearly visible at class VIII for boys and class VII for girls. 5. In Imphal town, stagnation started from class V. 6. The highest rate of dropout appeared in class A (48.48 per cent) and the lowest in class VI (4.79 per cent). The variation between the highest and lowest was 43.69. 7. Both dropout and stagnation were at a higher rate in schools in congested zones. 8. The first four important causes, according to the combined results, were poverty frequent transfer, repeated failure, and negligence of parents. 9. The study of the relative importance of causes revealed that out of 40 causes of dropout, 20 belonged to socio-economic, 17 to educational and three to miscellaneous categories. Socio-economic causes were the most important causes of dropout followed by educational and miscellaneous causes. There was complete unanimity among the three sets of judges regarding the contribution of major causes of dropout.

1452. DEVI, RAJPATI, *Barriers in the Primary Education of Scheduled Caste Students* (in Hindi), Ph.D. Edu., BHU, 1985

A study of the educational factors affecting the academic achievement of scheduled caste pupils studying in primary schools run by the Basic Education Department in Akbarpur division of Faizabad was undertaken with the objective of finding out if the level of achievement of these pupils differed from that of caste Hindu pupils, as also if the teaching methods, factors within these schools, home environment and health had deleterious effect causing poor academic achievement.

The study was conducted in six rural and four urban

schools from out of 68 basic schools, and the sample of pupils of the fifth class consisted of equal numbers of pupils from rural and urban-areas and also of caste and scheduled caste pupils for comparison. The sampling was done purposively to give representation to each category of pupils across sex and rural-urban background. They were given an achievement test consisting of items for testing major school subjects like science, Hindi, history, geography and arithmetic. The pupils also filled out an inventory for ascertaining the educational background of the family. Health background was found out through examination by a qualified doctor. In addition to this, the classroom transaction was observed with the help of a schedule through which teacher and pupil activities, educational and non-educational, were observed and time spent noted. Seventeen principals, inspectors, MPs and other leading citizens were interviewed. Further, 30 scheduled caste families were also studied using a pro-forma.

The study revealed: 1. There was no significant difference in the achievement levels of the pupils belonging to SC and the caste Hindu pupils in the type of schools studied. All were performing at very low level. 2. Conditions in the schools were far from satisfactory; the teacher-pupil ratio was very poor. The teachers had just minimum qualifications, and had poor training. 3. Methods of teaching were found to be defective and not suited to scheduled caste pupils. Teacher were not sincere in discharging their duties. 4. No discriminatory treatment towards SC pupils was noticed, though not much was done to induce them to achieve better than they were doing. These pupils were made to do work for others. 5. Home background conditions were found to be not encouraging for achievement. The homes had poor facilities, and there were very few persons there who were literate or educated. 6. Most of these pupils suffered from poor eyesight and poor general health.

**1453. DHONDIYAL, N.C.,** *Study of the Effects of Teacher Expectations on the Sociometric Status of Primary Grade Pupils*, Faculty of Education, Kum, U., 1984 (NCERT financed)

The major objectives of the study were (i) to identify populars and neglectees in classroom situations, (ii) to assess the acceptance of experimentally induced positive and negative expectations by teachers, (iii) to assess the effects of experimentally induced positive and negative expectations on the sociometric status of populars

and neglectees, and (iv) to assess the effects of experimentally induced positive and negative expectations on teachers' ratings of populars and neglectees in relation to certain student characteristics.

The sample comprised children from grades IV and V from 15 primary schools of Almora and Nainital. These children belonged to 30 classes. The schools were randomly classified into three equal groups Exp. I, Exp. II and the Control Group (CG). The experimental groups were assessed in terms of sociometric structure, using a sociometric questionnaire. The populars and neglectees were identified by Bronfenbrenner's fixed frame of references. The final sample consisted of 240 children divided into three equal groups. Sociogram analysis provided a sociometric score, and emotional expansiveness score and a social receptiveness score. The tools used were a sociometric questionnaire, personal data schedules for students and teachers, a student rating scale, an induction acceptance scale for teachers and an expectation induction form for teachers.

The major findings were: 1. There was no effect of experimentally induced positive expectations on populars' sociometric status, emotional expansion and teacher ratings. Though there was a significant effect on social receptiveness among neglectees, there was significant improvement in teacher ratings only. 2. There was no effect of induced negative expectations on emotional expansion and teachers' ratings of both the populars and neglectees; it resulted in significant improvement in social receptiveness of populars. 3. Negative induction of teacher expectations significantly lowered their social receptiveness with no effect of negative induction of teacher expectations on the sociometric status of populars. 4. Sex of populars did not interact significantly with positive and negative induction expectations on populars' sociometric status and emotional expansiveness. Positive induction facilitated improvement in social receptiveness of male populars while negative induction facilitated improvement in the social receptiveness of female populars. Positive induction of expectations facilitated a higher mean teacher rating among female populars while negative induction did not bring about any change in populars of either sex. 5. Positive induction of teacher expectations was found to facilitate a significant improvement in the case of sociometric status, emotional expansiveness and teacher ratings. 6. Negative expectations helped improve sociometric status of grade IV populars and social receptiveness of grade V populars. No variation across grades was revealed with regard to the teachers rating score of populars in the case of negative induction. 7. While positive induction of teacher expectations facili-

tated improvement in the sociometric status and social receptiveness status of high age populars, negative induction facilitated an improvement among populars of low age group. 8. Social receptiveness of populars of the high achievement group was higher than that of their counterparts in the control group under both positive and negative induction treatments while no effect of positive and negative induction on sociometric status, emotional expansiveness and teacher ratings of populars was noted. 9. Age of a neglectee was more significant in determining the effect of positive and negative induction of teacher expectation, particularly positive induction on sociometric status and social receptiveness than the grade to which he belonged. 10. The level of acceptance of positive induction of expectations regarding social status of populars did not interact significantly in relation to sociometric status and emotional expansiveness though it was more conducive to improvement in social receptiveness and teacher ratings of populars. 11. The level of negative induction acceptance by teachers influenced the effect of negative induction of teacher expectations on teacher rating score of populars; it was not effective in creating an improvement differential across the two experimental groups of populars.

1454. DHONGADE, U.D., *A Critical Study of Non-enrolment, Wastage and Stagnation during the First Two Years of Primary Education of Scheduled Caste Boys and Girls in Soyegaon Taluka, Dist. Aurangabad, Maharashtra State, IIE, Pune, 1986*

The objectives of the study were, (i) to find out non-enrolment, wastage and stagnation during the first two years of primary schools among scheduled caste boys and girls in Soyegaon Taluka, (ii) to study the causes of non-enrolment, wastage and stagnation, and (iii) to suggest measures to overcome non-enrolment, wastage and stagnation.

Seventeen villages out of 115 villages from Soyegaon Taluka were selected randomly. They were divided into three groups—small towns with population between 2000 and 6000, hamlets with population between 1000 and 2000 and localities with less than 1000 inhabitants. The parents were contacted and data regarding non-enrolment stagnation and wastage for the two years were collected. This was done for the period 1981-82 and 1982-83.

Some of the major findings were: 1. SC/ST population in the three types of villages were 9.78, 15.22 and 31.68 per cent respectively. SC/ST population was more in smaller villages. 2. During the year 1981-82 the total enrolment of SC/ST students was 40.7 percentage of non-enrolment of girls was larger than that of boys. Non-enrolment was maximum in villages with a population between 1000 and 2000. 3. Average percentages of absentees, failure and wastage were 10.7, 3.7 and 14.4 during the year 1981-82, and 8.7, 3.3 and 12.0 during the year 1982-83 respectively. Percentage of stagnation in addition to the failures during 1982-83 was 13.1. 4. The economic condition of scheduled caste families, lack of education of parents lack of social mobility and lack of adequate communications were the important factors coming in the way of enrolment of SC/ST. 5. Teachers in rural areas, particularly in areas where SC/ST students were in large proportion, were not effective. Many of them were untrained, lacked social awareness and enthusiasm and frequently absented themselves from schools. Schools lacked minimum facilities.

1455. DUNAKHE, A.R., *Research Needs in Primary Education—An Exploratory Study, SIE, Maharashtra, 1984*

The objectives of the study were, (i) to locate research needs in primary education, and (ii) to prepare model research designs.

The documentary survey and questionnaire survey methods were adopted for the conduct of the study. The documents surveyed were Surveys of Research in Education conducted by M.B. Buch (1974 and 1978), and the encyclopaedia of Educational Research, Mitzel (1982). The sample of the study consisted of 194 teachers and management personnel of municipal schools, private schools and education extension departments of teacher colleges. An open-ended questionnaire was used for data collection. Qualitative approaches were used for analysis of data. The data were collected from an incidental sample.

The major findings of the study were: 1. The teachers, headmasters and education extension officers were aware of the needs for research in the field of primary education. 2. Some of the problems they faced were regarding the interference of political workers in the day-to-day working of the school, curriculum construction, administration of primary education, etc. 3. They felt that there should be diversification of curriculum,

school timing, open entry to the schools and encouragement to balwadis. 4. The research needs spelt out in the study were related to the areas of absenteeism, administration, classification of students according to abilities, curriculum development and practices, preparation of quality educational materials, educational policy, evaluation system, parents, school entrance systems, school plants, schools timings, sociology of education, strength of students per class, students' characteristics, teachers, training of teachers, transport and textbooks.

1456. DUTTA, B., *Primary Education in Calcutta—An Anthropological Appraisal*, Ph.D. Anthropol., Cal. U., 1985

The objective of the study was to survey anthropologically the condition of primary education in the area of Greater Calcutta, viz., the city of Calcutta and its adjoining areas. The specific issues examined were mainly, (i) school categories, (ii) teachers and their conditions and social and economic milieu, (iii) syllabus and its coverage, (iv) students and their background, and (v) major hindrances and their remedies.

The sample consisted of 109 schools. The data were collected using survey schedules. The data comprised historical records, all allied information pertaining to the problem and the verbal and written reports of respondents. The tools used were interviews with an open questionnaire. The individual—student, teacher and guardian—was observed both as an individual and as a member of group and community, and also in different contexts. The data were presented in tables, graphs and charts and then analysed and interpreted.

The major findings were: 1. There were three major types of schools, viz., government, quasi-government, and non-government. 2. In all the three categories there were large differences both in structure and function. 3. The most prevalent medium was Bengali (83 per cent), followed by Hindi (6 per cent), English (6 per cent) and Urdu (1 per cent). 4. Most of the schools were non-residential. 5. Vacation days ranged between 47–70 per year. 6. School buildings were mostly under ownership but a few were rented. 7. The teachers were mostly in the age-group 21–50 years. 8. The percentages of female teachers were 62, 32 and 16 in city, metropolitan and rural areas respectively. 9. Educational qualifications of the teachers were low; the majority were matriculates, few were graduates and some were below matriculation, specially in rural areas. 10. Teachers had experience of

between 5 and 15 years. 11. For the majority of teachers, the pay-range was Rs 300–500 per month. 12. Teachers were mostly married and living in small families in houses rented or owned. 13. The average distance between residence and school was about five kilometres. 14. The syllabus was generally the same in all categories of schools, but most did not take care of physical education, sports, creative work and performing arts. 15. In rural areas students of higher ages were found in all the classes from I to V. 16. The ratio between the students and teachers had great variation in different areas ranging from 150:3 to 225:8. 17. Self-instruction at home was a rare phenomenon, and homework and lesson preparation were done under the guidance of a family member, parent or sibling, or private tutor. 18. Students belonged to all castes; but in Calcutta Brahmins, Vaidyas and Kayasthas were in higher proportion. 19. The location of a school was not planned with respect to students' residence and congeniality of surroundings. 20. Most schools lacked space. 21. The magnitude and depth of the problems were not fully known and everybody (government, guardians and teachers' organizations) was afraid to face them.

1457. ESWARA PRASAD and SHARMA, R. *Wastage, Stagnation and Inequality of Opportunity in Rural Primary Education—A Case Study of Andhra Pradesh*, ASCI, 1982 (Ministry of Education financed)

The objectives of the study were (i) to assess the position of the provision of educational facilities at various stages of school education in respect of coverage of school-going population, the distance to be covered by a child to have access to a school, enrolment of children belonging to weaker sections of society and enrolment of girls etc., and (ii) to assess the availability of minimum basic facilities in high schools such as buildings, furniture, library, health and sanitation and incentives.

A stratified sampling design was adopted for survey of areas in each district in the three regions. Two districts each in Guntoor, Kurnool and Telengana region were chosen on the basis of literacy figures, gross enrolment ratio and retention ratios. Within each district, two panchayat samiti blocks were selected on the basis of information for backward and developing areas. Within each block, five villages were selected and all primary schools in the villages formed the sample of the study. In this way, 45 primary schools from 40 villages

were taken as sample. Further, from each village a sample of households on the basis of information of dropouts was selected. The information in the study was collected with the help of three schedules. The first schedule was a village schedule which provided information about population, area under various crops, the population of the school-going age-group, etc. The second schedule was a school schedule that gave information on enrolment, stagnation and dropouts in respect to classes I to V for the last five years (1976-81), furniture and equipment available in the school, sports recreation activities, financial resources and expenditure of the school, qualifications and experience of teachers, etc. The third schedule was a household schedule concerned with information about members of household and their educational attainment, reasons for dropping-out of their children, etc.

The findings of the study were reported first of all for the Kurnool and Guntur regions and then for Telengana. 1. In Kurnool and Guntur districts, (a) the incidence of stagnation was higher among girls than boys; (b) stagnation was much higher in lower class people (Harijans) than others; (c) the incidence of stagnation was disproportionately distributed across the various classes in both the districts. The Harijans, however, showed more cases of dropout than others; (d) the dropout rate was higher than that of stagnation in Kurnool while in Guntur the incidence of dropouts was less than that of stagnation in all classes of people; (e) for all the five years, the dropout rate was systematically higher for girls than for boys; (f) when the extent of stagnation across the grades was considered, it was found that the rate of stagnation showed a progressive decline from Class I to V. This decline was higher for boys than for girls; (g) in Kurnool the rate of dropout was considerably high in all the classes among boys while for girls it was concentrated at the point of entry and showed a decline from grades I to V. 2. In the case of Telengana, the findings were: (a) The educational wastage of scheduled caste boys at the primary stage was of the order of 94.74 per cent and for girls it was 87.26 per cent; (b) the average percentage of stagnation for boys and girls was 45.40 and 47.06 respectively; (c) there was no association between school quality and wastage in education; (d) the average number of children in schools per family was more than the number of dropouts or children who never attended school. On the contrary, the number of girls in schools per family was less than the number of boys therein; (e) level of income and caste were important factors in wastage and stagnation. Other significant factors were occupational status of the father, parental

educational achievement and the number of illiterates in the family.

1458. GOGATE, S.B., *A Study of Primary Education in Marathwada*, a Project undertaken by the Swami Ramanand Teerth Research Institute, Aurangabad, in collaboration with the IIE, Pune, 1984

The objectives were (i) to study the facilities available in primary schools in terms of school building, playground, cleanliness around the school, seating arrangements, teaching-learning aids, etc., (ii) to study the qualitative and quantitative growth of primary education in the pre and post independence period, (iii) to study the regularity with which the primary schools are held, the reactions of supervisors about the teachers and the manner in which teachers were able to fulfil their responsibilities, (iv) to study the extent and causes of dropouts and stagnation till the students reached standard IV, (v) to study the achievement of children of Std. V in language, numeracy and general knowledge (based on history, geography and science), (vi) to study the enrolment of girls as compared to that of boys and to study the enrolment of students in Marathwada as compared to enrolment in Maharashtra as a whole, and (vii) to make suggestions to improve primary education in Marathwada.

During 1980-81 there were 8720 primary schools in Marathwada. These belonged to various types, namely, (i) single teacher schools, (ii) schools having classes I to IV, (iii) schools having classes I to VII, (iv) schools conducted by private managements, and (v) schools conducted by zilla parishads. This classification was not mutually exclusive. Researchers individually visited 244 schools. Roughly three per cent of the schools of each type, representing all the districts of Marathwada, were selected. In addition, researchers visited 53 schools where an achievement test was administered. The tools were a scale to grade primary schools, questionnaires in respect of teachers, and a graded achievement test developed by the project director.

Some of the findings were: 1. Prior to 1948, almost all schools were conducted by the Nizam's regime. Schools conducted by private managements were non-existent. However, the freedom fighters of the state had opened schools at Aurangabad, Beed Ambejogai, Parabhani and Hipparga. These did not get any support from the Nizam's government. Prior to 1948, though Marathi was

the medium of instruction, Urdu used to be taught from Std. III. 2. Prior to 1948, Marathwada also had schools of non-formal education in mosques (Maktabs) and pathshalas, and also in the estates of big landlords. 3. Girls' education was non-existent prior to 1948. 4. During 1984-85 the number of schools, students and teachers in Marathwada was schools, (10,293), boys (7,84,000), girls (5,14,000), teachers (30,942). 5. In urban areas 35 to 40 per cent of the teachers were females. This percentage in rural areas was between six and seven. In urban areas 36.75 per cent of the teachers did not stay at the place of work. This percentage in rural areas was 27.1. Ten per cent of the rural teachers were involved in farming. Fifty per cent of the teachers did nothing to improve their professional skills; similarly 25 per cent of the teachers made no efforts to improve students. Thirty per cent of the teachers did not participate in monthly meetings. Most of them did not read educational literature. From 50 to 60 per cent of the teachers attended schools regularly. Fifty per cent of the teachers reported paucity of facilities in schools while 25 per cent complained of clerical and other non-educational work. 6. In rural and urban single-teacher schools, 60-70 per cent of the boys dropped out by the time they reached Std. IV; in the case of girls this percentage was only 16. In multiple-teacher schools, the dropout rate was between 40 and 50 per cent. 7. In the achievement test, (the test consisted of four parts, being for Std. I, II, III, and IV and each carrying 25 marks), 439 urban students scored 16.48, 11.62, 7.42 and 5.63 out of 25 respectively. About 702 rural students scored 15.62, 11.19, 7.43 and 6.21 respectively. Thus, by and large, students of Std. V had shown achievement which was barely equivalent to the level of Std. II. 8. Many schools did not have basic facilities like the blackboards, chairs, tables, benches, etc. Only 36 per cent of the schools had drinking water arrangements. In almost all the schools, the environment around the school was not healthy.

1459. HUSSAIN, M., *Wastage and Stagnation in Primary Schools of Rural Areas of Bhilwara District*, SIERT, Rajasthan, 1982

The study aimed at, (i) determining the rate and form of wastage in primary schools in rural areas, (ii) finding out the rate of stagnation, and (iii) finding the teacher-pupil ratio in urban and rural areas.

Primary schools of all the panchayat samitis of

Bhilwara district from 1976-77 to 1980-81 were taken up for the study. The normative survey method was used. Educational wastage pro-formas were filled in by the headmasters. Data were collected from registers for admission, attendance, examination and issue of transfer certificates.

The study revealed: 1. The rate of wastage was very high, and it was highest in the first two classes. 2. Out of 682 primary schools, 506 were single-teacher schools and in these the rate of wastage was much higher than that in multi-teacher institutions. 3. Most single-teacher schools had classes one to five and this resulted in wastage. On the other hand, the position was comparatively better in single-teacher schools with two or three classes. 4. About the forms of wastage, the findings were that the dropout rate was higher in the first two classes; failing once or repeatedly led to school-leaving and the nonprovision of all the five classes in the same institution resulted in discontinuation of studies by the students. 5. The rate of stagnation was comparatively higher in single-teacher schools but there was no significant difference in it between boys and girls. 6. The teacher-pupil ratio in Rajasthan as a whole was 1:49 whereas in rural areas of Bhilwara district it was found to be 1:26.

The study suggested that, to make the maximum use of available resources, efforts should be made to enrol all the boys and girls of the 6-11 age-group. With an excellent pupil-teacher ratio of 1:26, it should be possible to bring about qualitative improvement.

1460. JAIN, A., *Development of Primary Education under Local Bodies in Maharashtra (1882-1984)*, Ph.D. Edu, Poona U., 1985

The study was conducted with the purpose of determining (i) how the local bodies were established down the ages till today, and (ii) whether expansion in primary education had taken place under democratic decentralization over a century.

The data collected were mainly from primary sources which included the annual progress reports in Bombay state since 1982, reports on general administration (1933) in the Bombay Presidency, commission reports, the five-year plans, the Bombay Education Acts, important circulars relating to the problems of primary education issued by the Education Department, reports of the Maharashtra Government, administrative reports of the school boards, reports and records of the zilla parishads, etc. Besides informal interviews with the of-



ficials of the Poona Zilla Parishad, municipal corporation, cantonment board and teachers of schools under these bodies were conducted to identify the problems faced by these local bodies in bringing about expansion of primary education. The data were collected from an incidental sample of respondents.

The main findings of the study were: 1. Before 1963, all the primary schools were financed and administered by the State Education Department. In 1864-66, the receipts of local fund cess became available and a large number of primary schools were established and maintained from the cess-fund. 2. The Primary Education Act of 1923 made a revolutionary change in the existing pattern of administration of primary education. All the major municipalities and district local boards were empowered to manage primary schools situated within the limits of minor municipalities in the district and were regarded as 'local authorities'. 3. The Primary Education Act of 1947 introduced major changes in the administration. Only a few 'Authorised Municipalities' were given the power to manage primary education within their areas and were vested with similar powers as the District Local Boards. 4. Till 1960, there were variations in the administrative set-up in three zones of the state, viz., Western Maharashtra, Vidarbha, and Marathwada. 5. After 1960, the minister of education held the authority in the matter of proper reorganization, management and control of education. The officers of the Department of Education and the local bodies shared the responsibility of administration of primary education in the state. 6. After 1962, the zilla parishads were made responsible for the administration of education for the districts and uniform pattern of administration was established throughout the state. 7. Grant-in-aid to zilla parishads was given by the state government which met about 90 per cent of the expenditure of the zilla parishads. 8. The government had powers to give directions to the zilla parishads regarding subjects, curriculum, textbooks and standards for teachers. 9. There were municipal school boards and cantonment boards, which had till then been functioning in the state for management of primary education in the state to a certain extent. 10. The expenditure on primary education had been increasing during 1960-61 and it was expected to rise further. Salaries of teachers formed a major percentage of the total direct expenditure. 11. For the implementation of plans of compulsory primary education, local bodies were involved since 1884. But, complete responsibility was not given over to

them in administration and the provincial government held the major powers and responsibility. However, it was found out later, that local authorities were needed to carry on the administration of education. 12. The case studies of the local authorities undertaken in Pune district reflected on both the advantages and disadvantages of having local bodies carry out the administrative functions of primary education. However, much progress was noticed in the case of primary education of Pune area since the establishment of local bodies, viz., the municipal school board, the zilla parishad and the cantonment board.

**1461.** JOSHI, G. K., *Expansion of Ungraded Unit Teaching System: Evaluation and Results*, STE, Rajasthan, 1978

The objectives of the project were (i) to make a comparative study of scholastic achievement of students up to class four after learning through traditional teaching methods and an ungraded unit teaching system, (ii) to compare the subject-wise attainment of students of classes three and four taught through these two methods, and (iii) to evaluate the two systems from the point of view of wastage and stagnation in primary classes.

Five schools each from Bhilwara, Udaipur, Chittorgarh and Banswara districts and Rajsamand were selected for the study. The sample included rural and urban schools, boys and girls, single- and multi-teacher schools. On the basis of random sampling methods, 100 students each of rural and urban schools were taken up for the study. The data were collected through questionnaires to be filled in by teachers and district education officers, evaluation sheets and reference materials.

The findings of the study were: 1. The ungraded unit method was more effective in teaching social studies and mathematics. There was no significant difference in attainment level in other subjects as a result of teaching through either of the two methods. 2. The use of the new method had practically no effect in solving the problem of wastage and stagnation in rural and urban schools.

**1462.** KAPADIA, K.P., *A Study of the Development of Primary Education in the State of Gujarat after Independence*, Ph.D. Edu., SGU, 1984

The major objective was to study the development of primary education between 1947 and 1980 in the state of Gujarat.

This research work was a documentary survey referring to different records and reports on education and some authentic notes on the reports from scholarly persons. The methodology used in the study was of the historical and survey research type.

The major findings were: 1. The position of primary education in Gujarat was admirable as the state ranked third in this respect among the other progressive states of India. 2. There was a considerable increase in the number of schools during the last three decades. The state had succeeded well in attracting more and more pupils to schools. 3. During the three decades from 1950 to 1980, there was an enrolment explosion. The number of boys on the rolls during the period increased three times and the number of girls five times. 4. The percentage of female trained teachers was less than that of male trained teachers during the years between 1950-51 and 1960-61. From 1965-66 onwards, a steep rise occurred in the number of male trained teachers and the same trend continued till 1979-80. 5. The expenditure kept on steadily increasing till it started doubling every five years. 6. Efforts were made to overcome the two evils of wastage and stagnation but not much progress was seen. 7. The problem of single-teacher schools also remained.

**1463.** KRISHNAMURTHY, R., *A Study of Position of Enrolment of Children in the Age Group 6-13 years and Problems Involved in Their Enrolment*, SCERT, Andhra Pradesh, 1985

The objectives of the study were (i) to find out the enrolment ratio of children in the age-groups 6-11 and 11-13 years to the child population in the corresponding age groups, (ii) to identify the problems being faced in the enrolment of children, and (iii) to enquire into the measures taken so far for the effective enrolment of children.

The sample of the study consisted of 46 schools (41 primary and five upper primary) of Tandur block of Rangareddy district of Andhra Pradesh. Besides this, 44 parents, 47 teachers and 37 community leaders were also involved in the study to identify the problems of enrolment. The data were collected with the help of the School Information Schedule to find out enrolment of students, the Teachers and Parents Interview Schedule

to find out the problems in enrolment, and the Schedule for the Community to interview village leaders to know the problems in enrolment of children.

The findings of the study were: 1. In the villages in which the sample schools were situated, there were 6255 children in the age group of 6 to 11 and out of them only 3329 were enrolled in schools. There were 1485 children in the age group of 11-13 years, out of which 780 were enrolled. 2. The enrolment of children of scheduled caste was 4.7 per cent and that of scheduled tribes was 5.1 per cent in the age group of 6 to 11 years. The position with regard to girls of scheduled castes and scheduled tribes in the same age group was quite poor. 3. Only 17.24 per cent and 18 per cent of children of scheduled castes and scheduled tribes respectively could be brought into the stream of upper primary education. 4. The regular attendance of children in the schools ranged from 60 to 75 per cent. 5. The attendance of the children before and after serving the midday meals did not show any difference. 6. The problems perceived by parents for non-enrolment of children were non-suitability of school timings, lack of adequate accommodation in schools, poverty, looking after younger ones at home, not having separate schools for girls and lack of women teachers in schools. 7. The problems envisaged by teachers causing non-enrolment were poverty, illiteracy, and orthodoxy of parents, lack of incentive to children in the form of books, lack of furniture in the school, etc. 8. The problems revealed by community leaders for non-enrolment were poverty of the parents and their feeling that education would not help in meeting the needs of life. 9. Measures taken for enrolment of children included visiting the houses of non-enrolled children, serving midday meals, supply of uniforms and textbooks and cash grants to scheduled tribe students. 10. Most of the teachers working in the schools did not reside at their place of work.

**\*1464.** LAL, S., *Early Childhood Education — An Effort to Enhance School Enrolment*, NIPCCD, New Delhi, 1986

The objective of the study was to examine the enrolment pattern and dropout rate of children who underwent early childhood education in anganwadis.

About 1700 children from the villages of the Kathwa ICDS project who moved out from anganwadis from 1977 to 1981 were followed up by interviewing the parents and school teachers. The exposure to early child-

hood education ranged from six months to three years.

The major findings were: 1. Nearly 70 per cent of the children were enrolled in elementary schools. 2. The enrolment of higher castes was marginally better than that of economically weaker sections. However, 60 per cent of the children from weaker sections got enrolled. 3. Cumulative dropout in the four-year period was 40 per cent, the dropout being maximum in the first and second year of schooling. 4. Male children's enrolment was found to be much higher than that of female children. 5. Those who had exposure to early childhood education were adjusted better and picked up faster in the first two years of schooling.

**1465.** LYNDEM (LASO), B., *A Critical Study of Developmental Plans and Programmes in Primary Education in the State of Meghalaya since Independence*, Ph. D. Edu., NEHU, 1985

The objectives of the investigation were (i) to trace the development of primary education in Meghalaya, (ii) to study the developmental plans and programmes launched by the Government of Meghalaya for the promotion of primary education in the state, (iii) to find out the present position of the implementation of the developmental plans and programmes launched by the Government of Meghalaya in the field of primary education, and (iv) to make suitable suggestions on the basis of the findings for the further improvement of primary education in the state.

The development of primary education in Meghalaya was traced. Relevant records and other literature were studied, discussions were held with some selected personnel and a field study was conducted. A questionnaire was developed and administered to 577 heads and senior teachers of a random stratified sample of 306 primary schools (which covered about 25 per cent of the population of primary schools in East and West Khasi Hills Districts and the municipal and cantonment areas of Shillong). Both qualitative and quantitative analysis (mostly by computing percentages) was carried out.

The major conclusions were: 1. There was progress in respect of various aspects of primary education like establishment of new schools, strength of teachers, enrolment of students (though there were fluctuations sometimes in the enrolment figures). Financial assistance sanctioned by the state government to the district councils relating to various aspects of primary education increased. There was an increasing trend in the expendi-

ture on both general and primary education. 2. Meghalaya had implemented several developmental programmes in the field of primary education to achieve the goal of universalization. But some of the programmes were implemented only in few schools. 3. The percentage of single-teacher schools, female and trained teachers were 42, 56 and 39 respectively. On an average, each school had 2.47 teachers. In East and West Khasi Hills Districts, teachers below matric ranged from 69 to 75 per cent of the total numbers. The same percentage in Shillong Municipal and Cantonment areas was 25. About 64 per cent respondents felt that new primary schools in rural areas should be opened by government. No teacher had utilized the programme of assistance to authors for writing or publishing books. About 5 per cent of the schools possessed a school library. Only five schools had a science laboratory. About 91 per cent of the heads of schools expressed great satisfaction over the training received by their staff. Very few teachers attended in-service programmes during 1980-83. 4. Though, in the implementation of different programmes, there was still a log, the picture became very poor for private unaided schools under district council administration. Barring a few stray instances, these schools were almost untouched by any of developmental programmes.

**1466.** MALI, M.G., *A Critical Study of the Single Teacher Schools and Plan for Improvement*, Shri Mouni Vidyapeeth, Gargoti, 1984 (NCERT financed)

The major objectives of the study were (i) to make an enquiry into the physical facilities of single-teacher schools, (ii) to study the organizational pattern and teaching methods in single-teacher schools, (iii) to study the difficulties encountered in organizing these instructional programmes in such schools, (iv) to study the extent of wastage and stagnation in single-teacher schools, and (v) to try out a programme of ungraded units to avoid wastage and stagnation.

Information was collected from single-teacher schools in Radhangiri taluka of Kolhapur district through mailed questionnaires. Interview schedules also were used for in-depth studies. The sample comprised all 98 single-teacher schools in the taluka and all teachers therein and selected children.

The major findings were: 1. Of the 98 single-teacher schools in the taluka, only six had independent build-

ings while 54 had adequate space of which 35 were hygienically sound. 2. Only two schools had independent playgrounds. 3. There were 160 chalkboards in the 98 schools; only 80 were in usable condition, while six schools had roll up boards. 4. Only nine teachers had a copy of the syllabus which they used while the others were not aware of its need. Sixteen schools had an adequate number of textbooks. 5. Since working in a single-teacher school involved living away from their families or spending a considerable amount of time on commuting each day, teachers were not willing to work in such schools. 6. Despite training, teachers were not adequately equipped to manage such schools efficiently; they were not aware of suitable teaching methods, were unable to give appropriate assignments or keep others gainfully occupied while handling one group. Teachers were also not able to prepare a common timetable for the four grades. 7. Because of the remote location of the schools, supervision was either non-existent or negligible; besides, the supervisory staff was not competent to guide these teachers. 8. Follow-up of 819 boys and 368 girls in class I revealed that only 227 boys and 45 girls had completed class IV in four years; 71.3 per cent passed class I while the remainder dropped out; the same situation prevailed in classes II, III, and IV. 9. Reasons for dropping out were failure and poor economic conditions. Because of social and religious reasons, the girls stayed away. 10. In the ungraded model tried out, a variety of methods, viz., individual instruction, group instruction graded teaching, and self-study were used after appropriate orientation and training of teachers in preparing suitable assignments.

**1467.** MANDAL, G. L., *Universal Free and Compulsory Primary Education in Bihar (1950-74)—A Study of Problems and Measures*, D. Litt. Edu., Bih. U., 1980

The main aim was to locate the stresses and strains encountered in course of implementation of the scheme of compulsory primary education and to suggest remedial measures.

The entire gamut of universalization of primary education was surveyed.

The study revealed: 1. Primary schools intended for children of 6-11, i.e. schools with classes I-V were made available to 96 per cent of them. Three-fourths of the school-going population in the age group 11-14 found a middle school (classes VI-VIII) within walking distance

from their habitat. 2. Provision of schooling facilities for classes I-VIII within a walking distance of every child was the target to be attained within a period of 5-10 years. 3. About 57 per cent of the total number of children in the age group 6-14 were enrolled by 1978. 4. There was a kind of built-in resistance among the landless agricultural labourers, scheduled castes and tribes, etc., to availing of the facilities for primary education and therefore, the need for sustained and vigorous drives was imperative. 5. Out of every 100 children enrolled in class I, only 25 reached class V and only 15 went up to class VIII. 6. The facilities available were underutilized.

**\*1468.** MOHITE, P., *Readiness Programme for School. A Search for a Viable Model*, Dept. of Child Development, MSU, 1981

The main objectives of the project were (i) to develop an effective model for a short-term school readiness programme with minimum cost and making maximum use of available resources, (ii) to determine the influence of three short-term programmes with different approaches on language development and scholastic skills of children from low-income groups who had no prior exposure to formal pre-school experiences, and (iii) to develop in lower-class children some basic skills essential to cope with the first grade demands in the areas of language and scholastic tasks.

Fortyfive boys and 35 girls from ages 5 to 6 years, having no pre-school experience, and going to attend Grade I were selected as the sample. A pretest and post-test experimental design was used. Three types of programmes were given to three different groups of children: an academically oriented programme, a progressive philosophy based programme, and a mother-education programme.

The results indicated that the difference in the area of language and scholastic tasks was significant on the paired t-test, both in the academic and the progressive philosophy based programmes. The difference between the total pre- and post-test scores on the paired t-test was significant on all the three programmes.

**1469.** NIEPA, *Project 'Arise' for UEE and Adult Literacy*, New Delhi, 1986

The major objective of the project was to evolve through experimentation a comprehensive integrated

programme of development in the selected cluster of villages. More specifically, the objectives of the project were (i) to achieve the objective of universal elementary education (UEE) and eradication of illiteracy through community involvement, (ii) to involve the community through participative investigation in the identification of the problems, formulation of plans and implementation of the strategies, (iii) to involve the community in monitoring and evaluation of various programmes of educational and socio-economic development, (iv) to establish linkages and coordination with other developmental agencies by identifying the educational components of their programmes and thereby generating social demand for education, and (v) to critically examine the existing administrative structure and its behaviour so as to identify remedial/alternative measures by which community participation in the decision-making process was ensured.

The approach followed was participatory. The broad format of a village education plan was formulated.

The major findings and conclusions were: 1. As regards participative technique, the involvement of the community in decision-making and entrusting and assigning responsibilities in supervision, monitoring and evaluation were found desirable. 2. The strategy of community involvement right from the outset also helped to take into account local customs traditions and the agrarian cycle of activity. 3. The Village Education Committee in this project emerged as a significant feature and an effective instrument for people's involvement. Apart from their efforts at mobilizing the community and persuading them to send their children to school, they also undertook the responsibility of general maintenance of the school. 4. A major breakthrough for the project also was the remarkable change in the attitude of religious leaders. 5. The favourable response to instructional materials provided help in further increasing enrolment. The enrolment position as in December 1986 was 66 per cent; of this 88 per cent were boys and 35 per cent were girls. 6. Some broad conclusions could be drawn from this research. Firstly, utilization of inputs, at an effective level was possible only when the community was duly sensitized and involved in the process of enrolment and retention. Secondly, the teacher should play the role of a change agent in seeking the involvement of the community. Area officers at block, sub-division and the district level should accept this strategy for operational purposes and provide all possible support and guidance. 3. The teacher preparation programme had great potential and tremendous

possibilities. The main emphasis was on integrating theory with practice. All learning must be concretized more meaningfully, with the help of work situations existing in the immediate environment.

1470. RAI, R.M., *A Survey of Elementary Education in the Rural Areas of Ghazipur District*, Ph.D. Edu., BHU, 1987

The objectives of the inquiry were (i) to study the selected educational societies of elementary education of Ghazipur district, (ii) to study the relationship of elementary schools and the rural community, (iii) to study the different aspects of the curriculum of primary schools, (iv) to study the financial position of primary schools and their sources of income, (v) to study the admission procedures in primary schools, (vi) to study the method of measurement and evaluation used in primary schools, (vii) to study the methods of teaching used by the teachers, (viii) to study the socio-economic status of students of primary schools of rural area, and (ix) to study the problems of teachers of primary schools.

For the study, 100 primary schools of Ghazipur district were selected randomly. Out of these institutions, 100 headmasters, 500 teachers and 3043 students studying in class V were taken for study. Data were collected through the Rural Basic Schedule, Problem Schedule of Teachers and Socio-economic Index.

The major findings of the study were: 1. All primary schools worked under the administration of the Basic Education Council and there was a village committee for primary education in every village. 2. Average strength of teachers per school was four. 3. There was a primary school for every 20,000 population. Average strength of students per school was 216.17. 4. In rural areas, 79.85 per cent boys and 20.17 per cent girls belonged to backward classes. 5. Average literacy percentage in the district was 25.96 in which male literacy was 39.82 per cent and female literacy was 12.4 per cent. 6. Eighty-seven per cent of the schools were located in buildings constructed by the Basic Education Committee. 7. The greatest problem of teachers in these schools was economic. 8. The main source of income of students in these areas was agriculture. 9. Forty-three per cent of the teachers studied up to class X only. 10. About 23.93 per cent of mothers and 44.31 per cent of fathers were literate. 11. Ninety per cent of the students used chalk for writing. 12. Internal assessment was

prevalent in these primary schools. 13. About 68 per cent of the students sat on the floor during school hours.

1471. SACHCHIDANANDA, *Disparities in Elementary Education—A Case Study of Bihar*, ANS Institute of Social Studies, Patna, 1982 (Indian Institute of Education sponsored)

The objective of the study was (i) to trace the development of primary education and literacy in Bihar state from 1921 to 1981, and (ii) to compare the percentage of literacy in various districts of Bihar.

The statistical data from various sources like the Census of India, Planning Commission reports, etc., were tapped and analysed. The expansion of education was considered from the viewpoint of physical, social, economic, cultural, historical and political factors that determined the pace of development.

The findings of the study were: 1. Expansion of literacy in Bihar had not been keeping pace with the expansion of population. 2. Bihar had the bulk of disparity in education with regard to very high, high and middle socio-economic disparity rates in various districts. 3. There were seven districts with low disparity in literacy and seven with high disparity in literacy. 4. Those districts which had a high literacy rate were also high in the enrolment of students in schools. 5. The districts which were high in an urban industrial component were also high in literacy rate. 6. The high literacy in males had no relationship with high literacy among females. 7. The enrolment of girls was highest in the districts which had a large number of missionary and voluntary organizations working for the upliftment of the tribals. 8. Among the Christian tribals, there was 100 per cent literacy among boys as well as girls. 9. The population of workers among scheduled castes was very high in comparison with high castes who went for blue collar jobs. 10. The percentage of literacy among scheduled castes was 6.53. 11. The percentage of literacy among tribals was 11.64. 12. There was high enrolment of tribal children in the districts which had missionaries and social welfare agencies. 13. Christian missionaries were more actively engaged in literacy work than government agencies. Non-Christian missionaries engaged in literacy work were the Aryasamaj, Ramakrishna Mission, Sikh religious organizations, etc.

1472. SAXENA, B.B., *A Survey of the Position of Enrolment Drive*, SIERT, Rajasthan, 1982

The objectives of the study were to find out, (i) the exact position of the enrolment drive and the problems faced in its implementation, and (ii) the causes of dropout during the session and suggest effective measures to boost enrolment.

The study covered three panchayat samitis each from the tribal areas of three districts, namely, Jodhpur, Kota and Udaipur. Information blanks were received from 19 schools and seven teachers' training institutes. Fourteen headmasters and seven teachers were interviewed. Information blanks, school records and interview schedules were used for data collection.

The study revealed: 1. The percentage of increase in enrolment in case of boys was from 75 to 103 and that for girls from 55 to 106. The total increase was from 70 to 105 per cent. 2. The main difficulties encountered in the enrolment drive were indifference of parents to education and their poverty, insufficient incentives for children and lack of interest in education. 3. The main causes for dropout during the session were found to be sharing of the responsibility of looking after young brothers or sisters at home and doing domestic chores; lack of interest in school life; stringent financial condition of parents and the negative attitude of the society towards education.

1473. SAXENA, R.R. and MITTAL, S.C., *Impact of Mid-day Meals Programme on Enrolment and Retention at the Primary Stage*, NCERT, 1985 (USAID financed)

The study was undertaken to examine two hypotheses: (1) The Mid-Day Meals (MDM) Programme increases significantly the school enrolment or participation rate of children. (2) The MDM programme reduces significantly the dropout and repetition rates of children in the educational cycle or the MDM programme increases the retention of children in the educational cycle. The study was extended to all the 13 states which were implementing CARE-supported MDM programme. The educational and community blocks in Haryana were adopted as units of measurement. Haryana had only a CARE-supported MDM programme. Karnataka had its own MDM programme in addition to a CARE-supported one. In Haryana, data were collected from all the blocks of the state. In Karnataka, a sample of ten

districts was selected by using simple random sampling without a replacement technique. All the blocks in the selected districts were covered in the study in order to control the effect of socio-economic and educational background of districts/blocks. Adequate/suitable techniques for statistical treatment of data were adopted. The states were divided into clusters on the basis of their policy on the MDM programme and on the basis of data considerations. The dependent variables were (1) total enrolment rate (ERT), enrolment rate for girls (ERG), change in enrolment rates (CERT), change in enrolment rates for girls (CERG), total retention rate (RRT), retention rates for girls (RRG) and retention rates for SC/ST (RRS).

The major findings of the study were: 1. The district level analysis of all the sets of data arrangement except for Cluster I indicated the influence of the MDM programme on total enrolment in the form of higher ERT means for MDM districts than those for non-MDM districts. However, the stated indication seemed to disappear when ERT means were adjusted for the influence of socio-economic and other educational variables. The picture became clear, when ERT was found to be dependent on PB (Percentage of Beneficiaries) in all sets but one of data arrangement. This analysis highlighted the phenomenon of higher ERT values for the districts with low percentage of beneficiaries under the MDM programme. The same phenomenon appeared more sharply in the block level study, especially in the case of Karnataka. The analysis of ERT at two points of time thus indicated nothing but the policy on the MDM programme followed by different states under which pockets with low ERT were covered under this programme in all the states with the exception of a few. The analysis of change in ERT, however, provided a definite indication of the influence of the MDM programme on total enrolment. The districts with higher intensity of MDM programme during 1973 had indicated a higher increase in ERT over the period 1973-78. Particularly Cluster I provided a stronger relationship than Cluster II did, thereby suggesting that the states with a higher proportion of poverty had more influence of percentage of beneficiaries in 1973 on change in total enrolment. The block level study in both the states provided more definite and concrete evidence in this regard. Among the two states, Karnataka indicated a still stronger relationship between change in ERT and percentage of beneficiaries in 1973. 2. Distribution of ERG at both the points of time indicated a higher degree of variations than for ERT due to which analysis of ERG was able to provide a

more clear indication of the impact of the MDM programme. ERG means for MDM districts remained higher than those for non-MDM districts even after eliminating the effect of socio-economic and educational factors. Again, the state of Karnataka indicated higher ERG means for the groups of blocks with low intensity of MDM beneficiaries. This difference, however, was not as wide as was indicated by the ERT. Analysis of change in ERG provided a clear-cut indication of the impact of the MDM programme by way of indicating a higher change in ERG for the districts which had a high intensity of MDM beneficiaries during 1973. This relationship was clearly visible in the case of Cluster I in the district level study. Cluster II, however, failed to register such a relationship because most of the states in this cluster had less than one-third population below the poverty line while Cluster I had states with a considerably high percentage of population below the poverty line. Another factor which might be dominating the enrolment of girls was the indifferent attitude of parents towards the education of their daughters and this was specially reflected in the case of Haryana which is more affluent but recognized as backward in girls' education at the elementary stage. The study in Karnataka state, however, indicated a definite and strong evidence of the impact of the MDM programme on girls' enrolment. 3. The district level study did not provide indications for the difference in RRT means for MDM and non-MDM districts, whereas the block-level study in Haryana definitely indicated a higher RRT mean for MDM blocks than that for non-MDM blocks. This difference continued to exist even after applying the adjustments for the influence of related variables. Although the study of Karnataka failed to provide statistically significant differences between RRT means for the three groups of blocks, these means indicated higher retention rates for the groups of blocks with higher percentage of beneficiaries under the MDM programme. Further, dependence of RRT on PB was not indicated in the analysis of the district-level study, although some evidence was available for the existence of a relationship between the two when states were clustered by the type of MDM programme. The block level study in Haryana provided more definite indications of dependence of RRT on percentage of beneficiaries, whereas the block-level data from Karnataka failed to provide the same. 4. The district-level analysis indicated that RRG means were higher in MDM districts than those in non-MDM districts, specially in the case of Cluster II. Four of the five states in this Cluster are backward in girls' education

due to which the influence of the MDM programme was clearly indicated by the analysis of the data. Moreover, the data of the block-level study in Haryana and Karnataka states did not provide concrete evidence for the influence of the MDM programme on retention rates. Still, it was observed that the RRT for different groups of blocks indicated higher means for the blocks with higher intensity of MDM programme. All the same, these differences were also not statistically significant. The position remained the same while evaluating the dependence of RRG on percentage of beneficiaries under the MDM programme. 5. Only in Cluster I did the analysis of RRS indicated that districts with an MDM programme had lower RRS means than those without an MDM programme. Adjustments for the influence of socio-economic factors, however, did not indicate the difference between RRT means of MDM and non-MDM districts. The block-level study in both the states also did not provide higher RRS means for the blocks having a higher percentage of beneficiaries. Further, RRS was also not found to be related to percentage of beneficiaries under the MDM programme in the district and as well block-level studies. It appeared that the influence of MDM programme on RRS was not strong enough to be reflected in the analysis of data.

1474. SHARMA, H.C., *Effect of the Stay of Teachers on the Enrolment and Retention of Boys and Girls in Primary Schools, SIERT, Rajasthan, 1982*

The project aimed at (i) finding out the effect of the stay of teachers at their headquarters on the enrolment and retention of boys and girls in primary schools, and (ii) making a comparative study of the effect of teachers staying and those not staying at their headquarters on the enrolment and retention of students of their schools.

From one panchayat samiti, ten schools where the teachers resided at their headquarters and ten others where they did not do so were selected for the study. The project covered one panchayat samiti, 20 schools, 48 teachers, 19 sarpanchs, 25 supervisors, including Education Officers and Additional District Education Officers. The survey method was employed. The tools used were a questionnaire, an interview schedule and school records.

The study revealed: 1. The retention, attendance and regularity of students was better in schools where teachers stayed at their headquarters as compared to that in those where they did not do so. 2. Teachers' stay at their headquarters was useful only when they were in con-

stant touch with the parents and behaved courteously. 3. Incentives like free books, uniforms and food had a positive effect on the regularity of students. 4. The school environment and facilities for games also contributed to retention. 5. Gram panchayats preferred to employ teachers who would keep in touch with them and treat students courteously. 6. Lack of good houses and proper facilities for the education of their children were two main reasons for the teachers not staying at their headquarters.

1475. SHARMA, R.C., *Wastage in Education at the Primary Level in Rajasthan, SIERT, Rajasthan, 1982*

The aim of the study was to find out the position of wastage (i) at the primary level in Rajasthan from 1970-71 to 1980-81, separately in classes one to five during the same period, and (ii) among Scheduled Castes and Scheduled Tribes during the last ten years.

The study covered all the students studying in classes one to five in Rajasthan. As teaching was done through the Ungraded Unit System and classes one and two were combined, the enrolment in these classes was calculated with the help of the formula: Enrolment in class one :  $\frac{\text{Enrolment in Ungraded Unit} \times 6}{100}$

The enrolment in class five was taken as it was.

The findings were: 1. In spite of a big increase in the number of schools and teachers, the state had been able to enrol only 56.6 per cent of the children in the age-group 6-11 in 1979-80, as against the national average of 81.9 per cent. 2. The percentage of wastage was found to be higher in the case of girls than of boys. 3. The wastage rate for girls from scheduled castes was 72.30 per cent and for others it was 63.38 per cent. 4. It was higher in the case of boys of scheduled tribes. 5. The rate of wastage at primary level in the state from 1970-71 to 1974-75, 1971-72 to 1975-76, 1972-73 to 1976-77 and 1973-74 to 1977-78 was calculated and it revealed that the decrease in the rate as compared to that at the national level was greater in the first phase and less in the following phases. 6. During these four phases Rajasthan was ranked 15th, 13th, 16th and 14th as compared to other states in the country.

1476. SHARMA, V.S., *Increase in Enrolment in Primary Schools: Efforts and Results, SIE, Rajasthan, 1976*



The study aimed at finding out (i) the utility of enrolment drives in primary and upper primary schools of Rajasthan and ungraded unit teaching system, (ii) the effect of various incentives given as parts of these drives, and (iii) the effect of appointment of lady teachers in rural co-educational schools to boost enrolment of girls.

The study was confined to Udaipur and Kota divisions. Statistics for six sessions (1970-71 to 1975-76) were taken into consideration. The sample was decided on the basis of proportionate numbers of primary and upper primary schools for boys and girls in rural and urban areas. In all, 155 schools were selected for the study. The normative survey method was employed. A school information pro-forma was the tool for data collection. Descriptive statistics for data analysis and critical ratio for drawing conclusions were used.

It was found: 1. So far as physical conditions were concerned, 44 per cent of primary schools had adequate facilities up to 1975-76, 27 per cent lacked even basic facilities like a black board. In upper primary schools, there was shortage of everything except carpets. 2. The effect of the enrolment drive was positive. It was not as expected in the case of girls. 3. Incentives proved to be useful in boosting enrolment and out of them the most effective in descending order were free meals, textbooks and stationery, fee exemption, free uniforms and scholarships. 4. The percentage of wastage in classes I to III showed a declining trend from 1970-71. 5. Due to the introduction of the ungraded unit system, the percentage of stagnation went down but the decrease was not significant. 6. There was no considerable effect of appointment of lady teachers in co-educational rural schools on the enrolment of girls.

\*1477. SIE (U.P.), *A Study of Dropouts and Failures in Primary Classes*, Allahabad, 1986 ✓

The major objective was to study the causes of dropout and failure among 6-14 age-group students and also to give suggestions and make recommendations concerning the removal of these causes.

The study was delimited to the four regions of the state, namely, the middle zone, eastern zone, southern zone and western zone. Various pro-forma were developed to collect data.

The main findings of the study were: 1. In all the four developed blocks, the development trend showed that from 6-8 class, 15 per cent were dropouts and 4 per cent were failures. 2. Maximum dropouts were seen among

children coming from backward classes. 3. No significant difference was noted in the successful candidates and those who dropped out in class V. 4. The main causes for dropout were illiteracy of the parents, poverty, lack of interest, distance of school from home, unattractive environment of the school, indifference of teachers, irrelevant curriculum, lack of physical facilities like water and sanitation, etc. in schools. 5. The suggestions of the guardians were: (a) Besides the curriculum children should be taught about the profession of their parents, and subjects related to the upliftment of life. (b) Schools should not discriminate between castes, religions, communities, rich and the poor, sex, etc. (c) Adequate physical facilities, a motivating school environment and teaching of craft should be provided.

1478. SIERT, *Rajasthan, Primary Education Curriculum Renewal Project in Bagadia Phalan (Banswara)—A Case Study*, 1982

The purpose was to study the impact of the Primary Education Curriculum Renewal Project on the Bagadia Phalan (Banswara) school.

The project was implemented in an ungraded unit class 'I' in July 1977. The school had classes up to III in which 29 (52.72 per cent) were boys and 26 (47.29 per cent) girls. About 72.4 per cent of the boys and 22.2 per cent of the girls were from scheduled castes (SC) and scheduled tribes (ST) respectively. The average enrolment was 72. Out of these students (36 boys and the rest girls) enrolled during the session 1974-75, 17 students (eight boys and rest girls) were dropouts. In class III, only 1.8 per cent boys and 1.8 per cent girls failed and they did not belong to SC/ST groups. The rest of the failures were from the ungraded unit. None of the ST students received any preschool education. Out of 55 parents, 30 (54.54 per cent) had a monthly income below Rs. 200 and 25 (45.46 per cent) between Rs. 200 and Rs 499, and nine had income above Rs 500. Thus, more than 50 per cent of the families living in the cantonment area were illiterate and poor.

Some of the outcomes of the project were: 1. Prior to the introduction of the project, many facilities were not available. There were inadequate facilities for stationery materials, teaching aids, medical check-up, drinking water, furniture, playground and garden. After the introduction of the project, the teachers started taking keen interest in school activities, especially cultural activities. 2. Working hours of this school were the same

in project curriculum and state curriculum. 3. Daily attendance of students increased by 52 per cent. Student participation in various activities improved by about 25 per cent. 4. Efficiency of teachers improved by 25 to 50 per cent. 5. Interest and involvement of the community increased and overall functioning of the school improved by 50 to 75 per cent. 6. The material and equipment provided increased by 25 to 50 per cent. 7. The other changes were awareness due to non-formal and adult education and establishment of new departments.

**1479.** SIERT, Rajasthan, *Primary Education Curriculum Renewal Project in Dunga Chotta (Banswara), A Case Study*, 1982

The study aimed at finding out the impact of the Primary Education Curriculum Renewal (PECR) Project.

Before the introduction of the project, the enrolment in the school in the year 1974-75 was 84 boys and 20 girls. The average attendance was 72 per cent. There were only three dropouts—two boys and one girl. There was no stagnation. In the year 1974-75 there were two higher secondary STC trained teachers. One of them was the headmaster. The total population of the village was 867.

Some of the outcomes of the project were: 1. Before the introduction of the project there was only one room, but after the project, the schools had three classrooms, one room for the headmaster and one verandah. 2. The total enrolment in the school increased by about 60 per cent during the period 1974-75 to 1980-81, after the introduction of the PECR project. As before there was no stagnation. The new instructional materials were satisfactory. 3. The teachers were trained every year for every class, and were satisfied with the training. Timely guidance was provided to teachers by TTI staff, SIERT staff and community members to their satisfaction. 4. In the project curriculum, the working hours and the weightage given to different subject areas, except Hindi and mathematics at ungraded unit level, were the same as prescribed in the state curriculum. Nine periods for Hindi and mathematics had been allotted for the ungraded unit class, whereas in the state curriculum six periods for mathematics and twelve periods for Hindi had been allotted. 5. The evaluation was a formative and grading system which had been introduced, along with remedial teaching after each unit test. 6. Socially useful productive work (SUPW) was included in the project

curriculum as a subject and one period per day was provided for it. Teachers for SUPW activities were trained. 7. After the introduction of the PECR project about 50 per cent improvement in the quality of education and 50 to 75 per cent improvement in the overall functioning of the school was noticed. 8. On the one hand family income had improved and, on the other, parents of almost all income groups sent their wards to the school. The percentage of illiterate fathers had gone down by 25 per cent and that of literates had gone up by 11.8 per cent. 9. Some of the important achievements were construction of a new school building, supply of materials and equipment by panchayat samitis, increase in enrolment of boys, especially of those from scheduled tribes, reduction of stagnation to zero per cent and of dropouts to 3.4 per cent, implementation of need-based curriculum according to the spirit of the project, effective supervision and change in attitudes and interests of the village community, teachers, gram panchayat samitis. The change was evident in their attitude towards education. The school had become the centre of change, whether physical, educational or social. There was a change in the attitude towards girls' education. Local people showed greater interest in the new curriculum.

**1480.** THAKUR, T., *The Case History of the Model Primary School in Assam*, SIE, Assam, 1973

The main objectives of the study were to see (i) whether the expectations of the model school scheme were fulfilled or not, (ii) whether the scheme was functioning satisfactorily, and (iii) if some general norms could be established for a model school.

Ten model schools were selected from Dibrugarh and Sibsagar districts. Schools were visited and on the spot study was made. Data were collected directly from schools on 21 points regarding academic and physical aspects of the school. Teachers, headmasters, ex-headmasters, supervisors, etc. were interviewed.

Some of the major conclusions were: 1. The schools failed to show a significant improvement in academic attainment. 2. The purpose of the original scheme had not been translated into action. The whole implementation process had various limitations. There was lack of communication and follow-up programmes. 3. The criteria to select the existing schools for conversion were not sound. 4. Two factors (teacher and locality) were mainly responsible for the total attainment of the school. The teacher stood out as the foremost factor.

The teacher training programme was defective. 5. The grant was a very inadequate one to convert a school into a model one. A lump sum grant was given only once.

\*1481. YADAV, M.S., et al., *Evaluation of Comprehensive Access to Primary Education (CAPE) Project in India*, MSU, 1986 (UNICEF financed)

The major objectives of the study were (i) to assess the extent to which the objectives of the project CAPE under phase I were realized, (ii) to identify the organizational and academic processes and conditions created for the implementation of phase I of the project, (iii) to study the relevance, effectiveness and feasibility of the processes and conditions created for the execution of phase I, and (iv) to judge the validity of the assumptions underlying the overall strategy of implementation of phase I.

CAPE project activities were carried out in 29 states and Union territories (UT) out of which ten states and UTs were selected for the sample. The states and UTs selected were Assam, Goa, Daman and Diu, Jammu and Kashmir, Karnataka, Maharashtra, Mizoram, Orissa, Rajasthan, Tamil Nadu and Uttar Pradesh. The sample consisted of 40 state-level officials, 142 teacher training institutes, 132 principals, 637 teacher educators, 1271 teacher trainees, 38 in-service teachers, 104 education officers, 23 artists and 22 printers. Information was also collected from 10 officers from the NCERT, 13 from the Regional Colleges of Education and 10 from UNICEF's Regional and Zonal Offices. The investigation strategy and the tools were tried out through a pilot study conducted in the state of Madhya Pradesh. On the basis of the pilot study, tools were modified. Data from the senior officials who were involved in decision making at national level, state level, and UNICEF officials were collected through unstructured interviews. Data related to the activities conducted by the Central Resource Centre and the Regional Resource Centres were collected through an information schedules prepared for this purpose from their official records. Checklists were used for obtaining information regarding physical facilities at all the resource centres. Data from the principals, education officers, teacher educators, teacher trainees, and artists were obtained through questionnaires. The information from printers was obtained through structured interviews. Most of the data were analysed qualitatively by categorizing programmes under different heads and calculating fre-

quency occurrences and percentages.

The major findings of the study were: 1. The organizational structure adopted for implementing the CAPE project in the country was found to be very suitable. 2. Revision of the TTI's curriculum was one of the essential activities in most of the states. It took much more than the stipulated time. 3. Different functionaries were provided training by the CRC and RDRC members, but at the time of survey, it was found that a large number of untrained personnel were working and they expressed the need for training. 4. The teacher-trainees faced several problems in the preparation of learning episodes. 5. The activity of preparing learning episodes (LEs) was considered useful by a majority of students (90 per cent). 6. The literacy and numeracy material was mostly developed by the teacher-educators in the workshops. 7. Developed LEs were screened and processed in the workshops. 8. At the time of the survey, except Tamil Nadu, no state could produce the minimum (240 hours learner engaged time) material which was specified for starting Phase II. 9. Material prepared was found to be relevant to the local needs of the learners. 10. On the whole, 50 per cent of the planned programmes could be conducted and 20.43 per cent of the allocated funds could be utilized in the project.

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