

## Educational Surveys

### A Review

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National surveys of education have come to precede all educational planning activities in a large number of countries. It is axiomatic that the existing status of educational programmes should be regularly appraised so as to improve upon them and to project plans for future development. This need is further magnified in India because of the geographical vastness and cultural and linguistic heterogeneity.

Further, India has set before herself the formidable task of providing free and compulsory education for all the children of the country. Educational surveys can help expedite the achievement of this objective by presenting to the administrators a general vista of the leeway to be covered in this direction. And, with the results of such surveys before them, the policy makers can proceed with greater clarity and specificity in designing their plans of action. Also, the unprecedented and imbalanced expansion of educational facilities during the post-independence period has made educational surveys of great value to educational planners.

Educational survey is a general name for all research activities which aim at collecting data about various aspects of the educational programme and the related policies and procedures. The data might pertain to location and utilisation of educational facilities, curricular programmes and instructional methods, textbooks and other instructional materials, school personnel, innovation practices, cost of education, school buildings, etc.

In India, systematic educational surveys had been a comparatively late development. Educational surveys began to play their due role in national planning only with the conduct of the first 'All-India Educational Survey' in 1957-59. Among the earlier

attempts, pioneering works by J. P. Naik and R. V. Parulekar would stand out as important. In 1939, J. P. Naik conducted a survey of a taluka in Dharwar district and one in Kolhapur district, later on. In 1945, Parulekar and his associates made a survey covering the Rajapur taluka of Ratnagiri district and revealed important facts about villages as educational units. Under the supervision of Parulekar, two more surveys were conducted by the Government of Bombay in the districts of Ratnagiri and Kolaba. Apart from these regular surveys, several stray efforts were also made in different parts of the country. As early as 1922, a survey was conducted in Mysore state to find out the provision of educational facilities in three population slabs. The survey conducted by Kini in 1927-28 studied the provision of educational facilities in three different areas with reference to seventeen community groups. Thereafter, two studies were conducted regarding lapse into illiteracy — one in Myadi taluka of Mysore state and the other in the Satara district of Bombay state. Education of backward classes was studied in the districts of Thana, West Khandesh, Nasik, Panchmahal, Karwar and Kolaba between 1947 and 1953.

A common feature about the surveys noted heretofore was that all of them were only local in their geographical area coverage. They concentrated on only a few talukas and districts. Thus, no large scale survey was conducted to see the status of education in India as a whole. Nor was any coordinated effort made for conducting state-level surveys. In effect, results of these surveys remained quite limited in their scope and implications for planning.

In India, conduct of large scale educational

surveys started in 1956-57. However, the movement gained momentum only in 1965, when a separate educational survey unit (ESU) was established in the NCERT. Within three years of its establishment, the ESU completed nine major surveys including the Second All-India Educational Survey (Buch and others, 1967). An examination of the surveys conducted between 1956 and 1972 would indicate that all the major surveys were conducted by central agencies like the Ministry of Education and the NCERT, whereas universities and other state institutions carried out state-level and local surveys. In view of the objectives with which they were conducted, these surveys might be broadly classified into four types—(i) Fact finding surveys, (ii) Comparative surveys, (iii) Evaluative surveys, and (iv) Bench mark surveys. Of the thirtyone surveys, abstracts of which follow this review, seventyseven percent were fact finding surveys while thirteen percent were evaluative. Third in order would be bench mark surveys (seven percent) and comparative surveys (three percent), the last.

Another useful classification of the surveys would be in terms of their geographical area coverage: (i) National surveys, (ii) State-level surveys, and (iii) Local surveys. Such a classification can specifically indicate what implicative values these surveys could have had for planning and administration.

### NATIONAL SURVEYS

Continuous nationwide surveys covering all stages of the educational system and intensively studying all related problems may be considered a somewhat visionary aim. In fact, presentation of accurate information, in a comparable form, about the progress of education in different parts of the country is more than an academic exercise. The value of a nationwide survey lies not only in marshalling a large amount of information which is difficult of access but also in posing a number of problems which, in turn, can serve as bases for more intensive surveys.

In all, seventeen national educational surveys have been conducted in India. Except one, all these surveys were conducted by the NCERT after its establishment in 1961. Educational facilities in the country were studied, for the first time, on a national basis in 1957-1959, when the first All-India Educational Survey was conducted by the Ministry of Education. The Second All-India Educational Survey (Buch and others) was carried out in 1967 which, perhaps, was the biggest survey ever conducted in the country. After this no attempt was made to study edu-

cation in India on such a comprehensive basis.\* Sharma and Sapra (1969) conducted a survey on primary and middle schools of the country to find out facts about wastage and stagnation. The ESU completed two surveys in 1968, regarding schools offering agricultural and technical streams. The study by Kulkarni and others (1970) was a comprehensive survey of achievement in mathematics at the primary, middle and high school levels. One survey (ESU, 1971) was on textbooks. Khanna's study (1970) was related to audio-visual education. In 1967, the ESU conducted a survey of parent-teacher associations. In 1968, the ESU conducted two surveys to study the institutions for the physically handicapped. Secondary teacher education was surveyed twice within a span of seven years: first in 1963 by the CIE and DEPSE, and then in 1969 by Pandey. Two surveys (Arora and Chopra, 1969; Mehra, 1970) were regarding elementary teacher education. Junior technical schools and colleges of physical education were surveyed by the ESU in 1967 and 1968, respectively.

### STATE-LEVEL SURVEYS

Education in India is, mainly, a 'state subject'. Thus, surveys at the state-level carry specific significance for planning and development. Despite its importance, no comprehensive survey of the state educational programme had been conducted by any of the states. In only a few states, attempts were made to survey some of the aspects of their educational programmes. However, these surveys were quite inadequate to present a total picture of the existing status of education in the respective states. Nor were they properly coordinated so as to offer constructive help in planning for future development.

Totally, twelve state-level surveys had been conducted in various parts of the country. Maharashtra State Board of Secondary Education (1964) conducted a survey on teaching of Hindi and English in secondary schools. Singha (1967) made a survey of craft education in West Bengal. Library services were studied in two surveys (Adaval and others, 1957; Murthi, 1964). The survey by Ahluwalia and Aggarwal (1970) was about the use of films and filmstrips. The SIE (Gujarat) made a survey of

\* The Ministry of Education and Youth Services have embarked upon the third All-India Educational Survey during 1973 wherein it is proposed to include all aspects of education, not merely school education.—Editor

primary teachers' training institutions in 1969. The SIE (Maharashtra) conducted a status survey of pre-primary training colleges. The survey by Nagappa (1966) was on adult neo-literates. Four surveys (Manuel, 1965; ESU, 1967; Pal and Ghosh, 1967; SIE Maharashtra, 1971) were related to teacher status and their working conditions.

### LOCAL SURVEYS

Because of the wide disparity between different parts, even within a state, regarding the social and cultural life, economic level, language, etc., many of our educational problems are highly localised. Therefore, proper solutions to these problems would require intensive surveys probing into them and discerning the factors involved therein. Such surveys should, preferably, be conducted by agencies which can continuously feel the pulse of the local community. Further, these may serve as the bases for decision-making at the state level regarding educational policies, priorities and preferences.

Only sixteen local educational surveys had been conducted uptill 1972. Two of these surveys (St. Xavier's Institute of Education, 1970; ESU, 1970) were on preschool education. Bombay Municipal Corporation (1956, 1957, 1958) conducted three surveys regarding primary education. The survey by the Maharashtra State Board of Secondary Education (1966) was on language teaching in secondary schools. Manuel and others (1960) made a survey of socio-economic conditions of students. Shah and others (1968) made a survey of school-children of Bombay. Girls' education in Mehsana district was surveyed by the Ministry of Education and Youth Services (1970). Bakshi surveyed physical education in Delhi schools twice (first in 1965 and again in 1971). Two studies (Srivastava, 1970; Srivastava and others, 1971) were on tribal education. One survey (Fuster, 1971) was related to sex education. Trivedi's survey (1966) was about social education programmes. A survey of socio-economic conditions of teachers was conducted by the Bombay Municipal Corporation (1966).

The above categorisation of surveys into national, state-level and local ones points, specifically, to their inadequacy. However, at the national level the Educational Survey Unit (ESU) of the NCERT has tried to cover some of the important aspects of the educational programme, but state-level and local agencies have not played their due roles in this regard. Although the above analysis reveals several important facts it does not provide a comprehensive picture of the subject areas covered in these surveys, and

their nature and extent. With this in view, the authors, in what follows, have tried to present an overview of the findings of important educational surveys conducted upto 1972. The authors have confined themselves to surveys conducted by institutions. Apart from these, a few individuals have conducted surveys as part of their doctoral work. However, these surveys are reported elsewhere within this volume.

In view of the subject areas they deal with, the fortyfive\* educational surveys conducted uptill 1972 are classified into (i) comprehensive surveys which cover all aspects of the educational system, (ii) surveys on school education, (iii) surveys on special education, (iv) surveys on professional education, (v) surveys on social and adult education, and (vi) surveys on teacher status and their working conditions.

TABLE 1

<i>Subjects</i>	<i>No. of Surveys</i>
1. Comprehensive Surveys	2
2. School Education	
(a) Preschool education	2
(b) Primary education	4
(c) Secondary education	5
(d) Achievement in education	1
(e) Textbooks	1
(f) Audio-visual materials	2
(g) Library services	2
(h) Physical education	2
(i) Girls' education	1
(j) School students	2
(k) Parent-teacher associations	1
3. Special Education	
(a) Education of the physically handicapped	2
(b) Tribal education	2
(c) Sex education	1
4. Professional Education	
(a) Secondary teacher education	2
(b) Primary teacher education	2
(c) Preprimary teacher education	1
(d) Junior technical schools	1
(e) Colleges of physical education	1
5. Social and Adult Education	2
6. Teacher Status and their working conditions	6

\* Besides the surveys abstracted in this chapter, abstracts 80, 97, 487, 566, 583, 587, 601, 604, 616, 649, 680, 695, 697 and 698 have also been referred to.

### COMPREHENSIVE SURVEYS

Of all the surveys conducted upto 1972, only two (Ministry of Education, 1960; Buch and others, 1967) were comprehensive surveys. The All-India Educational Survey conducted by the Ministry of Education (1960) was the first of its kind, and revealed several important facts regarding educational facilities in the country as they existed on 31st March, 1957. Of the 8,40,033 habitations with a population of 27,95,50,946, only 2,29,023 habitations (forming 27.26 percent of the total) with a population of 16,70,44,295 (forming 59.76 percent of the total) had schools in them. There were 944 school areas served by peripatetic teacher schools. Of the 2359 small habitations served by peripatetic teacher schools, 1888 had peripatetic teacher centres in them. In all, 5,99,985 habitations (71.42 percent) with a total population of 23,23,01,692 (83.10 percent) could take advantage of the existing location of schools. These schools were located either in the habitations themselves or in adjoining habitations which, ordinarily, did not require the children to walk more than a mile. Thus, 28.58 percent of the habitations with 16.90 percent of the total population were not being served by the existing schools. On 31st March, 1957, 176.24 lakh children were on the rolls of primary schools. Of these, 127.73 lakhs (72.47 percent) were boys and 48.51 lakhs (27.53 percent) were girls. On an average, there were thirtyfour pupils per teacher. The pupil-teacher ratio in different states varied from fortyone in Assam to twentyfour in Himachal Pradesh. The Second All-India Educational Survey was originally divided into three phases. The survey by Buch and others (1967) covered the first phase relating to the revision of the data of the first survey (Ministry of Education, 1960) and the collection of data required to prepare the district development plans. The second phase aimed at intensively studying the existing conditions of the educational institutions in respect to staff, enrolment and wastage, and physical facilities as well as some special educational problems. The third phase related to human resource development and educational planning in some industrially developing areas. The findings of the survey by Buch and others (1967) revealed that the percentage of rural population with primary sections in their own habitations or within a mile's distance was 87.23. There were 4,55,681 primary sections in the country. A primary section had, on an average, 104 pupils. The averages for rural and urban areas were 90 and 226, respectively. In rural areas, 40.72 percent of the primary sections were single teacher sections; 28.50 percent were two tea-

cher sections; 14.72 percent of the sections had three teachers each; 15.95 percent of the sections had four or more teachers. In urban areas, only 8.37 percent of the primary sections were single teacher sections. Girls constituted 36.20 percent of the enrolment in the primary sections of the country. The corresponding figures for rural and urban areas were found to be 34.26 and 43.20, respectively. In the rural areas, 82.25 percent of the population was served by middle sections. A middle section had, on an average, 112 pupils. The corresponding figures for rural and urban areas were 84 and 212, respectively. Of the enrolment in middle sections, girls constituted only 27.78 percent. The percentages of enrolment for rural and urban areas were 22.00 and 36.13, respectively. Enrolment at the middle stage was largest in private aided institutions. There were 26,883 secondary sections in the country. On an average, a secondary section in the country had 232 pupils. The corresponding figures for rural and urban areas were 168 and 329, respectively. Girls constituted 23.36 percent of the enrolment in secondary sections. There were 19,09,187 school teachers in the country. Of these, 62.6 percent were in primary sections, 22.8 percent in middle sections, and 14.6 percent in secondary sections. Percentages of trained teachers in primary, middle and secondary stages were 73.7, 75.2 and 69.5, respectively. Women teachers constituted 21.6 percent of the total population of school teachers.

### SCHOOL EDUCATION

Totally, twentythree surveys were conducted in the area of school education. These surveys might be classified as surveys relating to preschool education, primary education, secondary education, etc.

Two surveys dealt with preschool education. The survey by St. Xavier's Institute of Education (1970) was a local survey covering forty-nine Montessori classes from Greater Bombay. It revealed that in most of these schools English was the medium of instruction. There were totally 240 teachers and sixty-four helpers. Of these, only 150 teachers were Montessori trained. The Educational Survey Unit (1970) made a survey of all unrecognised institutions offering preschool education in the cities of Hyderabad, Secunderabad and Delhi. The survey studied the functioning of these institutions with respect to school management, enrolment, teachers, equipment and assessment. It also included suggestions for improvement given by the heads of these institutions.

Primary education was studied in four surveys. Bombay Municipal Corporation conducted three local surveys on primary education. The first of these, conducted in 1956, was an intensive educational survey to find out the extent and causes of the failure of compulsory age children to join the schools. The survey was confined to the Worli area of Bombay. It was found that of the 911 children of compulsory school age enumerated in the sample, 60.37 percent were attending the schools. Fiftyeight percent of these children were boys and 42 percent were girls. Main reasons for the nonattendance of compulsory school age children were hesitation of parents to send their children unaccompanied, approaching the school after the last date of admission, truancy, gainful employment, and unfavourable socio-economic conditions of parents. Percentage of nonattending children was highest among sweepers. This was due to the general backwardness of the community. Bombay Municipal Corporation conducted a similar survey again in 1957. This study covered ten different localities of Greater Bombay. In another study the Bombay Municipal Corporation (1958) surveyed the age of entry of all children studying in standard I. The sample comprised 6,041 children from thirty schools which were selected randomly. The survey revealed that only sixtyseven percent of the new entrants in standard I were between 5½ and seven years of age. However, the age of entry to standard I varied perceptibly in different localities depending upon the socio-economic conditions of the inhabitants of the locality. The survey by Sharma and Sapra (1969) dealt with the problem of wastage and stagnation in the primary and middle schools of India. It was found that wastage and stagnation was 65 percent by the time children reached class V and it went upto 78 percent in class VIII. Incidence of wastage and stagnation was more among girls than boys. Dropouts were usually older in age and came from families of the low income group.

Five surveys were on secondary and higher secondary education. The survey by Maharashtra State Board of Secondary Education (1964) collected relevant data regarding academic and professional qualifications of teachers of English and Hindi. The percentage of teachers with English as a subject at their degree level was 45.8 and the corresponding figure for Hindi was 41.4. Percentages of trained graduate teachers in these subjects were 31.9 and 22.2, respectively. Also, there was a large proportion of nongraduate teachers who were teaching English and Hindi to standards X and XI. In 1966, the same institution conducted a similar study in Aurangabad Nagpur and Poona divisions. In 1968, the Educational

Survey Unit conducted two census surveys of schools in India which were offering agricultural and technical streams. The survey of schools offering agricultural stream indicated that about 60 percent of these schools were located in rural areas. More than 80 percent of the pupils who opted for this group belonged to rural areas and agricultural families. Majority of the teachers had obtained training in agriculture. The survey of schools offering technical stream revealed that the duration of the technical stream was different in different states and the number of subjects offered under the technical stream varied from one to six. About 70 percent of the teachers held diplomas in various branches of engineering. Singha (1967) surveyed craft education in West Bengal and reported that in most of the schools craft was taught in classes VI to IX; only in a few schools it was taught upto class XI. Absence of properly trained craft teachers, low salary, absence of well-planned programmes, overcrowding in the craft classes, dearth of equipment and raw materials were some of the common difficulties faced by these schools.

Kulkarni and others (1970) conducted a national survey to study the standards of achievement in mathematics at the end of primary, middle and high school education. They found that in all the states the percentage of performance was higher at the primary level than at the middle and the high school levels. Except in a couple of states, students from the science group scored higher than those from the humanities group. At all the three levels, boys scored higher than the girls. Students with high aspiration and favourable attitude towards mathematics scored higher than their counterparts with low aspiration and unfavourable attitude towards mathematics.

The only survey conducted on textbooks (ESU, 1971) revealed that, except in the mother tongue, there was no uniformity regarding the introduction of textbooks in different subjects, at the primary stage, in different states and union territories. In all the states, textbooks were provided for almost all the subjects at the middle and secondary stages. Except in Andhra Pradesh and Kerala, textbooks at the school stage were nationalised and approved by the state. The total number of school books in use was 12,292, of which 6,552 were for the secondary stage.

In the field of audio-visual education, surveys were conducted by Khanna (1970), and Ahluwalia and Aggarwal (1970). Khanna (1970) surveyed source materials in films and filmstrips and books on audio-visual education. He classified the available materials under art, communication, craft,

films, filmstrips and slides, graphics, mechanical aids, printing, photography, sculpture, puppetry and creative art, and radio and TV. Ahluwalia and Aggarwal (1970) reported about the use of films and filmstrips in the secondary schools of Madras state. It was found that about thirteen percent of the schools had a separate projection room and fortythree percent of them had satisfactory seating arrangement. Most of the schools preferred to have instructional films in the regional languages. The general feeling of schools towards the use of films in instruction was positive.

Two surveys were conducted regarding library services in schools. The survey by Adaval and others (1957), in Uttar Pradesh, revealed that only 14.5 percent of the schools had provision for separate libraries and reading rooms. Libraries were, in general, poorly equipped. They suggested that a centrally located library should be provided with a qualified library staff in each school. Murthi's survey (1964) was on library services in secondary schools of Madras. He reported that stocks of books, periodicals and reference material were quite inadequate and the number of books added to the library, annually, was very small. Most of the libraries did not have qualified librarians. Generally, no provision was made in the school time-table for library work.

Bakshi made a survey of physical education in Delhi schools, once in 1965, and again in 1971. His former study revealed that the teacher-pupil ratio for physical education was 1:447. Expenditure on physical education was too low to carry out the programmes efficiently. The average area of the playground was 10.23 sq. yds. per pupil and in most of the schools physical education facilities existed only on records. The survey in 1971 reported that except for a slight improvement in the teacher-pupil ratio, conditions remained the same as during the previous study.

The Ministry of Education and Youth Services (1970) conducted a survey in Mehsana district concerning the spread of girls' education in that area. It revealed that the number of girls attending the primary schools was 41.2 percent of the total number of pupils in these schools. The main reasons for the nonattendance of school-age girls at the primary schools were financial difficulties, household work, customs, difficulty in getting educated bridegrooms and parents' indifference.

Manuel and others (1960) made a survey of the socio-economic condition of high school pupils in Coimbatore district. They reported that the status of the average rural family was markedly below that of the urban family, and academic help to the pupils from their parents and relatives was higher in the

urban group than in the rural group. Achievement of children from the professional group was the highest and it was the lowest for children from the unskilled group. There was marked positive correlation between nearness of school and achievement in English and mathematics for both urban and rural children. In the survey by Shah and others (1968), data were collected regarding the physical, mental and nutritional status of school children in Bombay. The survey of parent-teacher associations (ESU, 1967) revealed that the maximum number of parent-teacher associations were established in the year 1966-67. At the time of the survey, the largest number of PTAs were in Kerala (22.3 percent) and the fewest in Uttar Pradesh and Gujarat (0.5 percent each). Nearly 80 percent of the PTAs were in rural areas.

### *SPECIAL EDUCATION*

Five studies were in the category of surveys on special education. The ESU carried out two surveys in 1968 covering all institutions for the physically handicapped. The survey of institutions for blind students revealed that there were 128 institutions for the blind in 1967. Most of these institutions were situated in urban areas. Fifty percent of the students belonged to parents with an annual income of less than Rs. 500. These institutions had equipments for light engineering, weaving, tailoring, carpentry, dairy and poultry farming, and typing. In the survey of institutions for the deaf, mute and dumb, it was found that about 60 percent of these institutions were managed by private organisations getting aid from different agencies. Privately managed schools got 48 percent of their income through government aid. In these schools, the courses of study comprised language, number work, general knowledge, science, social studies, speech and lip-reading; in the later years of schooling, training in crafts like tailoring, weaving, printing, cane work and carpentry was also given. Two surveys were conducted on tribal education. The survey by Srivastava (1970) tried to identify the problems of the Lanjia Saora areas of Orissa with respect to different aspects of education. Technological backwardness, wastage and stagnation, economic hardship, improper school buildings, lack of trained teachers and teaching materials improper administration and lack of communication with the mainstream of Indian life and culture were found to be the main factors hindering educational progress among tribals. In another survey by Srivastava and others (1971), data were collected on the educational and economic conditions and employ-

ment positions of eighteen tribes from Bihar, Madhya Pradesh and Orissa. The study revealed that only two tribes, viz., Halba and Pradhan, were educationally as advanced as the general population of India. There were no educated persons at all among the Birhor, Abujmarhia, Koya and Kutia Kondh tribals. Fuster's survey (1971) was on sex education given to students from colleges of Bombay. It was found that most of the boys were not provided with any sex education by their parents; friends were the primary source of information. In several aspects, great similarity was noted between the responses of boys and girls.

### *PROFESSIONAL EDUCATION*

Seven surveys were conducted in the area of professional education. Two of these related to secondary teacher education. The first survey of secondary teacher education was conducted in 1963 by the NCERT through CIE and DEPSE. Pandey (1969) conducted the Second National Survey of Secondary Teacher Education in India. This study revealed that in 1965 there were 273 secondary teacher training institutions in the country. Uttar Pradesh had the highest number of institutions and Kashmir, the lowest. About 75 percent of the institutions were either fully or partly residential. Most often they were located in urban areas — sixtyeight percent of the institutions were exclusively for teacher education while the remaining were attached to degree colleges or university departments. Ninetyone percent of them were equipped with facilities for inservice education through their extension centres and units. It was also reported that teaching and supervision workload was heavier in the case of lecturers and method masters while the guidance load was heavier in the case of readers and professors.

Elementary teacher education was surveyed by SIE Gujarat (1969) and Mehra (1970). SIE Gujarat (1969) made a survey of the primary teacher training institutions in Gujarat state. Mehra (1970), in his National Survey of Elementary Teacher Education, found that the quality of teacher education had deteriorated on account of expansion. In 1965 there were 1,548 institutions of elementary teacher education. No uniformity was found among these institutions regarding the level and type of training given. Inservice education and extension service programmes were largely ignored. Most of the institutions were poorly equipped and most of the staff members did not have any experience of teaching in primary schools.

The SIE (Maharashtra) made a status study of pre-primary training colleges in Maharashtra during 1964-65. Of the eleven colleges in the state, ten were privately managed. All the institutions followed a common curriculum with daily teaching practice. Almost all the colleges levied tuition fees ranging between Rs. 72 and Rs. 180 per annum.

The ESU conducted one study on junior technical schools (1967) and one on colleges of physical education (1968). In the survey on junior technical schools, it was found that about 80 percent of such schools were under government management. Majority of the pupils in these schools were from low and middle income groups. Pupils in these schools preferred to undergo training in technical subjects and workshop practice. They suggested that arrangement be made for apprenticeship in industrial undertakings. The survey of the colleges of physical education revealed that about 3,000 students were studying in the certificate course while about 700 were in the diploma course. At the diploma and the certificate levels, the syllabi were prescribed by the Ministry of Education, whereas universities prescribed the syllabi for graduate and post-graduate courses.

### *SOCIAL AND ADULT EDUCATION*

Only two surveys were conducted in the area of social and adult education. Nagappa (1966) made an exploratory survey of the reading needs and interests of the adult neo-literates in Mysore state. The neo-literates wanted to read books on those topics about which they had previous knowledge through occupational experience or through other means of communication. These topics were generally related to their occupation, government, family and health, and animal husbandry. Trivedi's study (1966) in Kaira district revealed that social education programmes generally included literary, social, cultural, aesthetic and agricultural activities. Most of the active centres of social education were situated in towns. Adult education and literacy classes were run by the primary teachers. Generally, the instructional materials produced and provided by the State Social Education Committee were used in these centres.

### *TEACHER STATUS*

Six surveys had been conducted regarding teacher status and their working conditions. The Bombay Municipal Corporation (1966) made a survey

of the socio-economic conditions of teachers working in municipal schools. Based on the findings of this survey it was suggested that salaries of these teachers should be revised according to the rise in the living index; provision be made for housing facilities at a standardised rent; and their wards be given free education and medical facilities. ESU (1967) conducted a survey of the women teachers in the rural areas of Rajasthan. It was reported that about 80 percent of the teachers were married. More than 70 percent of the teachers had taken up the teaching profession due to financial difficulties. Residential accommodation was a problem for all the teachers. Arora and Chopra (1969), in their survey of the socio-economic and educational background of teachers working in elementary teacher training institutions, found that the minimum educational qualification for them was graduation with a degree or a diploma in education. Most of the teachers had teaching experience in secondary schools ranging from five to thirty years. Only a few of them owned houses, cars, scooters or motorcycles. About 50 percent of them had bicycles, radios or sewing machines. Majority of them were satisfied with their job.

Manuel (1965) assessed the workload of secondary school teachers in Madras state. It was found that, on an average, a teacher spent eighteen hours per week in classroom teaching, according to the timetable. The average workload in hours per week regarding the various aspects was 16.5 for teaching, 5.1 for correction, 3.4 for preparation, 1.4 for extra-curricular activities, 1.9 for individual attention to pupils and 0.6 for clerical and administrative work. Pal and Ghosh (1967) made a survey of the workload and service conditions of secondary school teachers in Uttar Pradesh. The study revealed that service conditions and other similar factors contributed

to the development of frustration and dissatisfaction among the teachers. Number of subjects and heterogeneity of classes taught increased the workload. The survey by SIE Maharashtra (1971) revealed that about 35 percent of the teachers working in junior colleges of education were not teaching the subjects which they had offered at the first degree; about 16 percent of them taught subjects which they had studied only at the professional degree level. On an average, a teacher worked for 6.75 hours everyday, including the time he might devote to reading.

#### *SOME SUGGESTIONS*

The authors, here, would like to suggest that a continuous programme of periodical surveys should go along with the programme of continuous planning. General national and state-level census surveys or sample surveys should be followed by bench mark surveys and evaluative surveys. Among the surveys discussed here, very few are evaluative surveys. In a developing country like India, evaluative surveys are vital. Surveys may be planned in the areas of social education and literacy, textbooks, children's and adult literature, teaching aids and instructional materials, innovations and classroom practices, changes in teacher education, women's education, etc. These surveys may provide directions for planning and implementing educational programmes and innovative practices in the field of education. There is need for a comprehensive national survey of all the aspects of education, viz., preschool education, school education, higher education, technical and vocational education, inspection and administration. Such a national survey of education can be linked with the census, every decade.

## ABSTRACTS : 699-729

699. ADAVAL, S. B., SWAMY, S. P., and AGARWAL, M., *Secondary School Libraries in Uttar Pradesh, Dept. of Edu., All. U., 1957. (MOE financed)*

This survey was undertaken to study the existing conditions in the school libraries in Uttar Pradesh with reference to qualified library staff, physical space, reading room facilities, books, etc., and to suggest suitable improvements for efficient functioning of libraries in the schools.

The sample consisted of 616 high schools and intermediate colleges having an enrolment of 2,77,310 pupils. Questionnaires were constructed covering all aspects of libraries and administered to the principals and librarians. Data thus collected were supplemented by getting some more information through the techniques of interview and observation.

The main findings of the study were: (i) out of the total institutions, 14.5 percent had the provision for separate library and reading rooms; (ii) sixty percent of the institutions had one room library with an area of about 500 sq. ft.; (iii) in case of fifty percent of the institutions, the walls of the libraries were neither decorated nor distempered; (iv) libraries were poorly equipped and furnished; (v) in most cases, one full-time librarian was appointed; main source of income for the libraries was fees; (vi) a small percentage of the school libraries were opened to the public; and (vii) some libraries received books as donation from various agencies such as planning department, All India Radio and information office of the central government.

The suggestions offered by this study for improvement and efficient functioning of the school libraries are as follows. It is suggested that a centrally located library should be provided with qualified library staff in each school. Government and the management should come forward to furnish and equip the libraries. There should be adequate reference books both for the teachers and pupils. A sense of library reading should be inculcated in the pupils. It is recommended that the library fees should be nominal and the fines collected should not be looked upon as source of income to the library. Development of library should be undertaken in each school in a systematic way.

700. AHLUWALIA, S.L., and AGGARWAL, Y.P., *A Survey of the Extent of the Use of Films, Filmstrips as a Medium of Instruction in Secondary Schools of Madras State, Department of Teaching Aids, NCERT, New Delhi, 1970.*

The survey was undertaken (i) to find out the extent of use of films and filmstrips in classrooms in Madras State; (ii) to find out the number of films and filmstrips, in stock, in the schools; (iii) to know the physical facilities available; (iv) to know the difficulties encountered by the schools in the repair of projectors; and (v) to know the type of films required.

A questionnaire seeking information about the availability and use of films, filmstrips, physical facilities available, type of films required, etc., was prepared. The questionnaire was sent to all the 448 schools in Madras State which possessed 16 mm film projectors. Only 260 schools responded to the questionnaire. Analysis of the data was done in terms of percentages.

The following observations were made: (i) 249 schools possessed 35 mm filmstrip projectors alongwith 16 mm projectors and 227 of the projectors were in working order; (ii) in 1965-66, the average annual frequency of utilising the 16 mm projector in 260 schools was 10.3 times, and that of the filmstrip projector 12.9 times; (iii) on an average, a school possessed thirteen classroom filmstrips and thirteen general filmstrips; (iv) on an average, a school borrowed 3.4 films from the central film library and other sources; (v) about 13.4 percent of the schools had separate projection rooms, fortythree percent of the schools had satisfactory seating arrangement, and seventyfive percent had light control system; (vi) more than half of the schools had technicians; (vii) in general the local repair facilities were nil; (viii) the general feeling of the schools was positive towards the advantage of the films; (ix) most of the schools preferred to have instructional films in the regional language, i.e., Tamil; and (x) fortytwo percent of the schools preferred to have films in science subjects.

701. BAKSHI, K. D., *Physical Education in Delhi Schools, CIE, 1965.*

The purpose of this study was to investigate into the facilities provided for physical education in

the schools of Delhi. The following aspects related to these facilities were studied: (i) the appropriateness of the staff provided; (ii) interest evinced by the teachers; (iii) the total expenditure on physical education in comparison to general education; (iv) games and other physical activities undertaken by the schools; (v) the provision for physico-medical examination of pupils; and (vi) the reasons for the apathy of a large number of pupils towards physical education.

The study was conducted on fifty-nine boys' and thirty-one girls' schools. Data were collected by using a questionnaire.

It was revealed that (i) the teacher-pupil ratio for general education was 1:26, whereas for physical education, it was 1:447; (ii) 16.8 percent and 12.7 percent of other teachers in boys' and girls' schools, respectively, helped physical education teachers; (iii) expenditure on physical education was too low to carry on the programme efficiently; (iv) the average area of the playground was 10.23 square yards per pupil and in most of the schools, physical education facilities existed in records only; (v) provision for gymnasium, swimming pool and store room were very rarely found in schools; (vi) fifty-six out of fifty-nine boys' schools and six out of thirty-one girls' schools were providing facilities for sports and games after school hours, but the number of boys availing of this opportunity was very small as compared to the total enrolment; (vii) forty-one out of fifty-nine boys' and eleven out of thirty-one girls' schools provided facilities for physico-medical examination.

702. *BAKSHI, K. D., Physical Education in Delhi Schools, CIE, 1971.*

The aims of the present study were: (i) to investigate into the physical education facilities provided in schools of Delhi; (ii) to compare these findings with those obtained in the previous study, conducted earlier by the investigator; and (iii) to see whether the administration is taking necessary interest in the said education. The questions to which the study tried to provide answers were: (i) whether all schools in Delhi have made some provision for physical education; (ii) whether all schools are having qualified physical education teachers, equipment and ground for various physical activities and games, and medical assistance; (iii) whether time is allotted for physical education in the regular school hours; (iv) whether all the students participate in physical activities in their respective schools; (v) whether all

schools provide for intra-mural sports and take part in interschool competitions in sports; (vi) whether all schools conduct annual sports and take the children out for excursions; and (vii) whether there is proper allotment of funds for physical education.

The sample consisted of all the secondary schools in Delhi. A questionnaire was developed to collect the data.

The important findings were, (i) there was a slight improvement in teacher-pupil ratio as compared to the findings of the previous study; (ii) there was at least one graduate with physical education degree or diploma in 121 schools of Delhi; (iii) the percentage of teachers helping physical education in schools decreased compared to the previous study and indicated the apathy on the part of the teacher community towards physical education; (iv) there existed a great gulf between the expenditure on general education and physical education; (v) playground facilities were not as per requirements; and (vi) the conditions for physico-medical examination in schools were unsatisfactory.

703. *BOMBAY MUNICIPAL CORPORATION, The Extent and Causes of the Failure of Compulsory Age children to join School in a sample Population of about 10,000 persons in the 'Worli' Area, Primary Education Department, Bombay, 1956.*

The major objective of this research was to conduct the first intensive educational survey in a poor locality with a predominantly industrial and labour population working in textile factories, commercial establishments or doing petty jobs. The other objectives of the survey were to estimate: (i) the percentage of compulsory school age children of the total population in the area; (ii) the incidence of nonattendance in children; (iii) the difficulties that prevent these children from attending school and how they can be remedied; and (iv) the extent of migration in the area and its effect on 'wastage' in primary education.

A sample was, therefore, selected from Worli ward. An educational survey of compulsory school age children for a sample of 9,316 persons residing in twenty-two chawls, selected at random in Worli (Electoral Ward No. 31) after an initial stratification according to language and economic status, was undertaken.

The study reveals that (i) the percentage of compulsory age children to the total population works

out to be 9.8; (ii) the number of children progressively decreases from 223 children in the age group six to seven years to 148 in the age group ten to eleven years and the difference between these two groups is as large as thirtyfour percent; (iii) out of the 911 children of compulsory school age enumerated in the centres, 60.37 percent are attending school and 39.63 percent are not attending and it is found that boys have attended school in larger number than girls and out of every 100 children attending school, fiftyeight have been boys and fortytwo girls; (iv) the incidence of nonattendance for each year in the compulsory age group definitely shows that the extent of non-attendance is higher in the age range six to nine years and decreases appreciably in the age group nine to eleven years; (v) the overall percentage of nonattending children is 39.6 percent of the total number of compulsory age children, the percentages of nonattending children in the age group six to seven and seven to eight years are much higher and are 65.0 and 41.1, respectively; (vi) in case of girls, the percentage of non-attending children progressively decreases each year; in case of boys, percentage of non-attendance decreases upto ten years of age, but in the last age group of ten to eleven years it rises from 12.5 to 16.9; (vii) the reason for this rise in non-attendance may, perhaps, be due to the fact that as the boys grow older, the parents succeed in finding gainful employment for them; (viii) it is seen in the survey that the highest percentage of nonattending children (79.2 percent) is found in chawl No. 107, wherein all the occupants are Harijan sweepers; (ix) the backwardness of the community as a whole and the low status of these Harijans are responsible for their indifference towards the education of their children; (x) there is a dire need for increasing schools along with increased efforts to get children to school; (xi) thirteen out of the sixteen schools in Worli area are running in double session; the remaining three, which are running in single session, are either situated far off from the residence of nonattending children or are very small and cannot accommodate more than 150 children, if double sessions are introduced in them; (xii) thirty percent of the children have failed to attend school because their parents are afraid to send them unaccompanied to school and this difficulty is found mainly in the case of children of age group six to eight years which forms about sixty percent of the non-attending children; (xiii) domestic work, poverty, truancy and physical handicaps prevent another thirtyfive percent of the children from attending school; and (xiv) a number of children get restless and leave school within a short while of their joining and it will improve mat-

ters if really good and experienced teachers are placed in charge of standard I and some interesting activity and practical work is introduced in the classroom to relieve the children from the boredom of purely academic work.

704. *BOMBAY MUNICIPAL CORPORATION, A Study of the Age of Entry of all Children in Standard I, 6,041 Children in thirty Schools in the localities under survey, Primary Education Department, 1958.*

The major aim of the investigation was to study the age of entry of children to standard I. The study was expected to verify and supplement the findings relating to the agewise analysis of non-attending children.

A sample of thirty schools was selected randomly. In the thirty schools, there were 6,041 children in standard I of which 4,995 were new entrants who had joined school between June and August 1957, and 1,046 were repeaters. The new entrants were seventynine percent and the repeaters were twenty-one percent of the total.

The findings of the study are: (i) only sixty-seven percent of the new entrants in standard I are between five years six months and seven years of age, whereas the remaining thirtythree percent are above seven years of age; (ii) among the children who fail in standard I, eighteen percent join school when they are about five years and nine months and the age of entry of thirtyfive percent is between six and seven years and as large a percentage as fortyseven join after the age of seven which shows that entrance to school at an early age has not been the reason for stagnation; (iii) only about sixtyfive percent of the children in standard I are below the age of seven years, whereas thirtyfive percent join school for the first time after they are seven years of age; (iv) age of entry to standard I varies in different localities and the factors responsible for such a variation are socio-economic conditions of the inhabitants of the locality; (v) on an average, in the age group of five to seven, only fiftyfive percent of children who enter standard I are from poor localities which shows, definitely, that a large number of children fail to join school till they reach the age of seven years, whereas in economically and socially better areas the percentage is eightyone; (vi) no marked difference in the age of entry of the two sexes is observed in the study; and (vii) the age of entry of children to school depends largely on the attitude of the parents and to a great extent on the availability of school-

ing facilities near the residence of children and on the socio-economic level of the parents.

705. *BUCH, M. B. and others, Second All-India Educational Survey, Educational Survey Unit, NCERT, New Delhi, 1967.*

The major objectives of this survey were: (i) to revise the data of the first educational survey in terms of the distribution and rise of habitations and delimitations of school areas of existing primary, middle and high schools and to collect data required for the preparation of district development plans for education; (ii) to study intensively (a) the existing conditions of educational institutions—primary, middle and secondary schools, colleges, engineering institutions at the degree and diploma levels and other institutions, in respect of staff, their qualifications, experience and age, enrolment and wastage, physical facilities in the form of buildings, libraries, laboratories and equipment, etc., and (b) some special educational problems such as factors impeding opening of schools in backward areas, dropouts at primary stage, single teacher schools, etc.; and (iii) to conduct studies in a few industrially developing areas on manpower requirements and educational needs and demands and such other matters pertaining to human resource development and educational planning.

It was planned to conduct this survey in three phases in terms of priorities. The study under report includes work done under phase I to fulfil objective (i) above. The figures reported are as on 31.12.1965.

The survey covered the whole of India, except Lahul and Spiti in the Punjab and Mizo Hills district in Assam where data could not be collected. Data for Nagaland, NEFA and Andaman and Nicobar Islands have not been included in this report. The survey was organised according to educational districts in various states. Each district was divided into blocks. Data were collected at block level. The block data were tabulated for every block in the block tables which were consolidated into district tables which were further consolidated into state tables. The all-India tables were prepared with the help of the state tables. Five different forms were developed and used for collection of data.

The salient findings of this survey are as follows. There are 9,82,251 rural habitations in the areas covered in this report, and their population is estimated to be 39,65,80,123. Of course, 76.41 percent are 'below 500' in the population scale and they

account for thirtyfive percent of the rural population. The percentage of small habitations is very high in all the states except in Kerala. The total number of urban habitations identified is 2,802. The percentage of rural habitations with primary sections in them or within walking distance of a mile is 87.23 of which 37.98 percent are with primary sections in them. The percentage of rural population with primary sections in their own habitations or within a walking distance of one mile is 94.96, of which 71.48 percent are having primary sections in their own habitations. Of the rural habitations not served, 87.23 percent have a population 'below 300', including 45.37 percent with population 'below 100'. There are 4,55,681 primary sections in the country. Of these, 84.98 percent are primary schools, 13.58 percent are part of PM schools (schools which have primary and middle sections) and 1.44 percent are part of PMS schools (schools which have primary, middle and secondary sections). The primary sections, therefore, are largely primary schools. The percentage of primary sections which are primary schools, is higher in rural than in urban areas. On an average, 9.23 primary sections and twentyfour teachers are available for every 10,000 population. The range of variation in the case of teachers among the states is from eighteen in Bihar to thirtyfour in Madras. In Manipur, however, sixtyfour teachers are available for every 10,000 population. On an average, a primary section has 104 pupils, the averages for rural and urban areas are 90 and 226, respectively. In the urban areas, the average enrolment varies from 115 in Bihar to 368 in the Punjab. In the rural areas, 40.72 percent of the primary sections have one teacher each, 28.50 percent have two teachers each and 14.72 percent have three teachers each. Only in 15.95 percent of the primary sections, the number of teachers is four or more than four. In the urban areas, 8.37 percent of the primary sections have one teacher each. In 23.68 percent of the primary sections in urban areas, the enrolment is 'upto 100' only. Multiple class teaching is necessary in 3,68,454 primary sections, i.e., 80.86 percent of the primary sections in the country and the percentages, separately, for rural and urban areas are 85.97 and 33.80, respectively. Girls constitute 36.20 percent of the enrolment in the primary sections in the country. The corresponding figures for rural and urban areas, separately, are 34.26 and 43.20, respectively. The enrolment in classes I to V is 74.36 percent of the estimated population in the age group 6+ to 10+ and the percentages for boys and girls, separately, are 93.39 and 54.70 respectively. For every 10,000 population, 989 pupils

are enrolled in classes I to V. The corresponding indices for boys and girls, separately, are 631 and 358, respectively. Of the total enrolment in classes I to V, 37.77 percent are in class I. These percentages for rural and urban areas are 40.36 and 28.53, respectively, and 35.82 percent of boys and 41.20 percent of girls on the rolls are in class I. The ratio between the enrolment in classes I and V is approximately 7:2 and the corresponding ratios for rural and urban areas, separately, are 4:1 and 2:1, respectively. Altogether, 7,12,894 rural habitations (72.58 percent) are served by middle sections, i.e., they have middle sections in them or within a walking distance of three miles. In the rural areas, 82.25 percent of the population are served by middle sections, whereas according to the First All-India Educational Survey, 50.40 percent of the rural habitations were served by middle sections and the proposals therein envisaged that the percentage would be raised to 89.05. Of the habitations not served at present, 3.51 percent are in the slab 1,000 and above, while 96.49 percent are in the slab below 1,000. In the entire country, 196 middle sections and 882 teachers are available per million of the population. On an average, a middle section has 112 pupils. The corresponding figures for rural and urban areas are eighty-four and 212, respectively. Considering the group of states and union territories with a three-year middle stage, 24.59 percent of the middle sections in rural areas have an enrolment of upto thirty only. About seventeen percent of middle sections either have one teacher each or do not have any teacher at all. Middle sections without teachers are either part of PM (schools which have middle to secondary sections) or PMS schools. In rural areas, about twenty percent of the sections have one teacher each. Of the middle sections, 18,347, i.e., 18.93 percent are incomplete. The corresponding percentages for rural and urban areas are 21.42 and 9.81, respectively. Contrary to the common belief that multiple-class teaching is necessary at the primary stage (and that too in rural areas only), multiple-class teaching arrangements have been found necessary in 16.59 percent of the middle sections. The corresponding percentages for rural and urban areas are 20.06 and 3.88, respectively. Of the enrolment in middle sections, girls constitute only 27.78 percent. The percentages for rural and urban areas are 22.00 and 36.13, respectively. The enrolment in classes VI to VIII is equal to 30.15 percent of the estimated population in the age group 11+ to 13+. The corresponding percentages for boys and girls are 43.46 and 16.33 respectively. It has been found that 207 pupils per 10,000 population are on the rolls inclu-

ding 152 boys and fiftyfive girls. Of the total enrolment in classes VI to VIII, 39.93 percent are in class VI, 32.59 percent in class VII and 27.48 percent in class VIII. Half of the number of girls in classes VI to VIII in rural areas are in class VI. Private aided institutions account for the largest percentage of the enrolment at the middle stage. At present, 6,01,154 habitations (61.20 percent) are served by secondary sections, including 16,231 habitations (1.65 percent) with secondary sections in them. Evaluating the present position in terms of population, 71.37 percent of the population is served by secondary sections including 9.09 percent that have secondary sections in their own habitations. In the population slab '5,000 and above', 1881 habitations (94.05 percent) are served by secondary sections, including 1,333 (66.65 percent) with secondary sections in them. The percentages of the habitations not served in the population slabs 2,000-4,999, 1,000-1,999 and below 1,000 are 16.83, 24.05 and 40.43, respectively. The range of variation in population served by secondary sections is from 38.13 percent in Rajasthan to ninetythree percent in Kerala. On an average, a secondary section in the rural area serves about 17,500 of population. There are 26,883 secondary sections in the country. Of these, 26.81 percent are secondary schools, 48.64 percent are part of MS schools and 24.54 percent are part of PMS schools. On an average, a secondary section in the country has 232 pupils. The corresponding figures for rural and urban areas, separately, are 168 and 329, respectively. In rural areas the average enrolment in a secondary section in the states varies from 50 in Jammu & Kashmir to 517 in Kerala. In the urban areas, the average enrolment per secondary section varies from 162 in West Bengal to 623 in Kerala. The low averages in a few states call for a close examination of the secondary sections. In rural areas, 41.52 percent of the secondary sections have enrolment 'upto 100' only. About eighty percent of the secondary sections in rural areas have enrolment of less than 241 each. In rural areas, 35.84 percent of the secondary sections have upto five teachers. There are 3,595 secondary sections, i.e., 13.37 percent, which are incomplete. The corresponding percentages for rural and urban areas separately, are 17.52 and 7.00, respectively. Of 26,883 secondary sections, 8,032 are without science laboratories of any kind. The latter include 5,928 (36.40 percent) secondary sections in rural and 2,104 (19.85 percent) secondary sections in urban areas. In the rural areas, 95.09 percent of the secondary sections have one medium of instruction and 4.40 percent have two media of instruction each. In urban areas, 84.16

percent secondary sections have only one medium of instruction each, while 72.71 percent have their respective regional language as the medium of instruction. The girls in secondary sections constitute 23.36 percent of the enrolment in secondary sections. The corresponding percentages for rural and urban areas are 16.58 and 28.69, respectively. The enrolment in classes IX and X is together equal to 19.37 percent of the estimated population in the age group 14+ to 15+. The corresponding percentages for boys and girls, separately, are 29.02 and 9.26, respectively. There are eightytwo children (sixtythree boys and nineteen girls) in classes IX and X for every 10,000 population. Of the total enrolment in the country, 64.50 percent are in private aided institutions. There are 19,09,187 teachers in the country including 11,96,111 (62.6 percent) in primary sections, 4,35,939 (22.8 percent) in middle sections and 2,77,137 (14.6 percent) in secondary sections. Women constitute 21.7 percent of the total number of teachers in the schools. Local bodies are the largest employer of teachers, followed by voluntary organisations (30.9 percent) and the government (20.7 percent). The percentages of trained teachers at primary, middle and secondary stages are 73.7, 75.2 and 69.5, respectively. The overall percentage of trained teachers for all the stages is 73.4, 64,981 teachers (23.4 percent) teach science. The academic qualifications of these teachers vary from matriculation without science to a master's degree in science. The number of teachers who have had science in their last academic examination, either at the graduate or postgraduate level, is 43,848 (67.5 percent), including 38,511 (59.3 percent) who are only graduates and 5,337 (8.2 percent) who are postgraduates. The number of teachers who had science in the last academic examination at the degree level or above and are also trained in methods of teaching science as one of their subjects is only 20,254. They constitute 46.19 percent of the science teachers who are graduates or above and 31.16 percent of the total number of teachers teaching science. The average number of fully qualified science teachers in a secondary section is, therefore, less than one. Only 22,287 science graduates and postgraduates out of 43,848, i.e., 50.83 percent, devote more than sixty percent of their teaching time to science. It is, therefore, surprising that all the science graduates and postgraduates do not devote their entire time to teaching science, especially when the available number of science teachers is very meagre. Alongwith these findings the investigator has also reported quite a few observations regarding school buildings.

706. *EDUCATIONAL SURVEY UNIT, Parent Teacher Associations—A Survey, NCERT, New Delhi, 1967.*

The main objectives of the study were to collect data on (i) popularity of Parent Teacher Associations (P.T.A.s) among schools; (ii) origin and development of the movement in the country; and (iii) parent participation in P.T.A.s.

The study covered 125 P.T.A.s of 154 districts in India. A questionnaire was used as the tool for survey. It was mailed to the district education officers and, in some cases, to schools.

The following were the findings of the study: (i) The maximum number of P.T.A.s was established in the year 1966-68. (ii) The maximum number of P.T.A.s was in Kerala (22.3 percent) then in Maharashtra (18.3 percent) and Tamil Nadu (17.7 percent). The smallest number of P.T.A.s were in U.P. and Gujarat (both 0.5 percent). (iii) About 75.5 percent P.T.A.s were in coeducational schools. (iv) Nearly 80 percent of P.T.A.s were in rural schools. (v) Parents showed better initiative in P.T.A.s of local body schools and coeducational schools (vi) More than half the P.T.A.s met fewer than four times a year. (vii) Only 6.1 percent of P.T.A.s granted scholarships, fifteen percent gave free books to the needy and 8.1 percent granted free uniforms to children. (viii) P.T.A.s in fifty-nine percent schools helped in getting suggestions for improvement from the parents; about one-third of P.T.A.s helped in getting cash donations from the community and about one-fourth of the P.T.A.s helped in raising book donations.

707. *EDUCATIONAL SURVEY UNIT, Survey of Junior Technical Schools, NCERT, New Delhi, 1967.*

The objectives were: (i) to study the growth of junior technical schools, their physical facilities, plant equipment, income and expenditure, qualifications of the members of the staff, etc; (ii) to study the socio-economic status of the pupils; and (iii) to know the views of the pupils and their parents regarding the courses offered in these schools.

All junior technical schools in the country were studied for fulfilling the first objective. For the second and third objectives, a sample of seventyfive pupils of the final year of four schools and their parents or guardians were interviewed. A questionnaire for the heads of the institutions was mailed. There was one interview schedule for the sampled

pupils of the third year class and one interview schedule for the parents of the pupils who were interviewed earlier.

The findings of the survey reveal that (i) of the 105 junior technical schools, one-third are located in rural areas; (ii) about eighty percent of the schools are under government management; (iii) majority of the pupils in this course come from low and middle income groups; more than sixty percent of them belong to families with an annual income of less than Rs. 1,000.00; (iv) minimum qualification for admission is middle school pass; actual admission takes place on the basis of achievement in science, mathematics, drawing and English in the schools last attended, achievement in admission test and personality interview; (v) sixtyseven of the 105 reporting schools function independent of polytechnics; as many as ten of the sixty-seven schools function in rented buildings; the libraries contain more non-engineering books than engineering ones; (vi) while the contents of the language for junior technical schools and the normal secondary schools are the same, the prescribed subjects of humanities have been replaced by an integrated course of social studies, which is in vogue as a compulsory subject; (vii) only eighty percent of the teaching posts in engineering subjects are filled up; about eighty percent of these teachers are diploma holders, while another six percent are engineering graduates; (viii) rural schools spend more money than their counterparts in urban areas; staff salary forms a major chunk of the expenditure; (ix) more than sixty percent of the successful pupils join polytechnics, about twentyeight percent go in for apprenticeship and jobs, and only about two percent seek admission to pre-university courses; (x) the pupils have a keen understanding of the structure and set-up of the course, prefer to undergo training in technical subjects and workshop practice, feel that the course lacks publicity among both the public and the industrial sector and suggest that arrangement should be made for apprenticeship in industrial undertakings.

708. *EDUCATIONAL SURVEY UNIT, Women Teachers in Rural Areas — A Pilot Survey in Rajasthan, NCERT, New Delhi, 1967.*

This study provides biographic data of the women teachers regarding their qualifications, professional career, educational background, occupation and economic conditions of the family, and certain domestic problems having direct bearing upon them as teachers.

Five percent of women teachers from primary, middle and secondary schools of Rajasthan state were selected from Bikaner, Jaipur and Bhilwara. The technique of interview was used for data collection.

Some of the salient findings are: (i) majority of the teachers (eighty percent) are married; (ii) most of the close relations of the teachers are uneducated; however, sixtyfour percent of the female teachers have husbands educated upto matriculation at least; (iii) about forty percent of the teachers come from families in the income bracket of Rs. 301-500 p.m.; (iv) there is a large variation regarding their qualifications which range from primary schooling to post-graduate degrees; majority of them have, however, passed their highest examinations privately after joining the profession; (v) about fifty percent of the teachers hold a professional diploma or degree; (vi) more than seventy percent of the teachers took up this profession due to financial difficulties; (vii) residential accommodation is an acute problem to these teachers; (viii) they are unhappy over frequent transfers from one place to another; (ix) majority of them feel that they do not get proper guidance from departmental authorities and that there is a need for extension and inservice training programmes which are lacking; and (x) attitude of the rural community towards unmarried teachers is not favourable.

709. *EDUCATIONAL SURVEY UNIT, Survey of Colleges and Institutes of Physical Education, NCERT, New Delhi, 1968.*

This survey of colleges and institutes of physical education imparting training for certificate and diploma courses took into account the growth of these institutions, facilities available in them in respect of instructional accommodation, hostel facilities, admission procedures, intake capacity, output, fees, stipends, income and expenditure, equipments and the staff.

All the institutions in the country that existed at the time of the survey were included in this study. A questionnaire was prepared and sent to all the institutions for collecting necessary data.

The following are the findings of this survey: (i) the courses in physical education are at diploma and certificate level and, in some institutions, at postgraduate level also; (ii) the duration of diploma and certificate courses is one academic year, whereas for postgraduate degree it is one or two years after the first degree; in sixtyseven percent of the institutions, in addition to the qualifications, special tests of personality are used for selection for admission; (iii) about

3,000 students used to be admitted during the years 1963-64, 1964-65, 1965-66 in certificate course and between 600 and 700 in diploma course; (iv) at diploma and certificate levels, the syllabi prescribed by the Ministry of Education have been followed; (v) university prescribes syllabus for graduate and postgraduate courses; the syllabus is divided into theory courses and practical training in teaching skills; (vi) in most of the private institutions, the physical facilities and equipment are found to be inadequate; and (vii) the expenditure is met from fees received from the trainees, grant from the government and contributions from the management.

710. *EDUCATIONAL SURVEY UNIT, Survey of High/Higher Secondary/Multipurpose Schools Offering Agriculture Stream/Group/Subject Under Elective/Optional/Diversified Course, NCERT, New Delhi, 1968.*

The purpose of this survey was to collect information regarding (i) location of these institutions, (ii) their management, (iii) admission procedures, and clientele and intake capacity, (iv) their examination results, (v) facilities like laboratories, workshops and other equipment, (vi) teachers—their qualifications, inservice programme, workload, and (vii) students.

A comprehensive questionnaire was prepared including items on the areas of information stated above. It was a census study and therefore, the findings were based on the data from all the schools.

Some of the salient findings are: (i) about sixty percent of the schools offering agriculture stream are located in rural areas; (ii) there is a wide variation regarding the class in which agriculture stream is introduced at the secondary stage; (iii) the institutions do not have adequate physical facilities or equipments; (iv) more than eighty percent pupils who opt for this group belong to rural areas and agricultural families; (v) majority of the teachers are trained in agriculture; their qualifications range from high school certification to M.Sc. degree in agriculture; and (vi) emphasis is more on theory than on practice.

711. *EDUCATIONAL SURVEY UNIT, Survey of High/Higher Secondary/Multipurpose Schools Offering Technical (Engineering) Group/Stream/Subject under Elective/Optional/Diversified Course, NCERT, New Delhi, 1968.*

The objectives of the study were to make a detailed survey of location of schools, their manage-

ment, admission procedures and clientele, intake capacity, laboratories, workshops and equipments therein, time allocation for theory and practicals, qualifications of teachers, inservice training, workload and expenditure.

Out of 444 schools in the country, 433 responded to the questionnaire prepared for the purpose.

The findings of the study are: (i) the duration of the technical stream is different in different states; (ii) the number of subjects to be offered under technical stream varies from one to six; (iii) applied mathematics and science are regular compulsory subjects under technical group; (iv) subjects like radio engineering, printing technology, automobile engineering, textile technology, electronics, and drawing are offered; (v) textbooks on technical subjects comprise hardly five percent of the total books available; and (vi) about seventy percent of teachers hold diplomas in various branches of engineering.

712. *EDUCATIONAL SURVEY UNIT, Survey of Institutes for the Physically Handicapped—Deaf, Mute and Dumb, NCERT, New Delhi, 1968.*

The survey was taken up to study the institutions involved in educational and vocational training of deaf, mute and dumb.

A questionnaire was sent to the heads of ninety-six institutions included in the census study, but only sixty-eight institutions responded.

Following were the main findings: (i) forty out of sixty-eight institutions that responded were managed by private organisations getting aid from different agencies; (ii) almost all schools gave some orientation programme at the preprimary schools which was followed by a course of instruction in general education; in majority of the cases this course was equivalent to primary school standard; (iii) the courses of study comprised language, number work, general knowledge, science, social studies, speech and lip-reading; in later years of schooling, training in crafts like tailoring, weaving, printing, canework and carpentry was given; (iv) forty-eight schools had group hearing aids, twelve had individual hearing aids, and only eighteen schools had audio meters; (v) private aided schools got forty-eight percent of their income through government aid and the balance was contributed by managements, donations and fees from the pupils; and (vi) average annual expenditure on a school during 1966-67 was Rs. 33,200/-.

713. *EDUCATIONAL SURVEY UNIT, Survey of Institutions for Physically Handicapped in India—Blind, NCERT, New Delhi, 1968.*

The survey was conducted to know the details about (i) institutions providing educational and vocational training for the blind; (ii) training institutions for the adult blind and also (iii) various teachers' training institutions.

One hundred and twentyeight institutions were taken up for study out of which eightythree responded to the mailed questionnaires.

The findings were: (i) from forty institutions in 1947, the number rose to 128 by August, 1967. (ii) seventyone out of eightythree schools that responded were located in urban areas; (iii) some schools had nursery classes, while only twentyfive schools had classes upto secondary level; (iv) the total enrolment in eightythree schools that responded was 3,659 during 1967-68 which was about 1.25 percent of the total number of blind persons of school-going age; (v) about fifty percent of the students belonged to parents with an annual income of less than Rs. 500.00; (vi) about half of the staff in government schools had some training in teaching the blind; the same ratio was true for teachers in non-government schools also; and (vii) there were equipments for light engineering, weaving, tailoring, carpentry, diary and poultry farming and typing.

714. *EDUCATIONAL SURVEY UNIT, A Survey of Unrecognised Institutions offering Pre-School/Elementary Education in Hyderabad, Secundarabad and Delhi, NCERT, New Delhi 1970.*

The survey aimed at studying the functioning of pre-primary/elementary institutions with respect to school management and administration, enrolment, teachers, equipment, assessment and to make suggestions for improvements by heads of these institutions.

An attempt was made to cover all the institutions in Hyderabad, Secundarabad and Delhi. In all, data from 164 institutions from the twin cities of Hyderabad and Secundarabad and thirtysix from Delhi were collected. A special proforma was prepared to fulfil the objectives and the investigators personally collected the data.

The study reveals the following. (i) All the institutions covered are privately run either by individuals or societies. Out of 164 institutions of

Hyderabad, fifteen are meant for pre-primary stage, one for elementary stage and 148 for both, while in Delhi nine are for pre-primary stage and twenty-seven for both the stages. These institutions are known as Montessori, Nursery, Kindergarten or schools with preparatory classes. In Hyderabad, the maximum number of schools (97) were established during the years 1962-67. (ii) One hundred and fiftythree institutions in Hyderabad, and thirtyfive schools in Delhi have age restriction for admission. Age limit is generally three to five in both the places. Most of the institutions do not require advance registration. (iii) At Hyderabad, the working days in a year range between 201 and 280, while in Delhi it is between 171 and 280. Working hours per week range between fifteen and thirtyfive hours for both the cities. Two institutions at Hyderabad devote three hours for curricular activities and three institutions at Delhi devote five to ten hours. Time devoted to curricular and other activities varies. Majority of the institutions have a two year course of pre-school education. Session starts at different times of the year at different places. (iv) There are certain institutions in Hyderabad which do not charge any fee; one institution levies admission fee upto Rs. 30/-, while in Delhi, it is observed that certain institutions charge lunch fee. (v) In Hyderabad, total area of these institutions varies from 10 square yards to 7,260 sq. yards. In Delhi, the total area varies from 12 sq. yards to 12,000 sq. yards. (vi) In Hyderabad, there were 8,597 children at pre-primary stage and 9,227 at elementary stage in January 1969. Enrolment has increased since 1966 to the extent of 176.3 percent at pre-school stage and 231.9 percent at elementary stage. In Delhi, there were 1972 children at primary stage and 1201 at elementary stage in January 1969, increase from 1966 onwards being 117 percent and 98 percent at pre-primary and elementary stage, respectively. (vii) In Hyderabad, there are 814 teachers working in 161 institutions of which 245 are trained and 569 are untrained. Majority of them (71.6 percent) have high/higher secondary education as their qualification and pay scales are very low. Only three teachers get pay between Rs. 201 and Rs. 230, others get in the range of Rs. 57 to 80, or even below that. In Delhi, 156 teachers are working in thirtysix institutions. Out of those, 106 are trained and 50 untrained. Eightyseven of them are high/higher secondary passed. Eleven teachers get a pay between Rs. 210 and Rs. 230 per month, while only one teacher gets less than Rs. 50. (viii) Various types of equipments are being provided at both the places. (ix) In Hyderabad, as in Delhi, most of the insti-

tutions undertake curricular activities through coaching of subjects. (x) Generally, English is the medium of instruction at both Hyderabad and Delhi. But in Hyderabad, there are institutions with more than one medium also. (xi) Majority of the institutions give home assignments. Majority of the institutions at both the places conduct periodic tests. Number of tests varies from institution to institution. While in Delhi, no child is detained at this stage, seventy institutions at Hyderabad detain children. (xii) The heads of the institutions at both the places are in favour of some national system of education. They oppose formula education. A few suggest moral education to form a part of instruction and the play-way method to be practised at this stage. A few headmasters at Hyderabad have recommended training facilities for the teachers and extension of pre-primary education in rural areas.

715. *EDUCATIONAL SURVEY UNIT, Survey of School Textbooks in India 1969-70, NCERT, New Delhi, 1971.*

The survey was undertaken during the year 1969-70 with the following main objectives: (i) to get a complete enumeration of textbooks being used at the school stage in various states and union territories; (ii) to get a comparative picture of the nationalised and approved textbooks; (iii) to get a comprehensive view of the production, pricing and distribution policies and procedures followed in different states and union territories.

In terms of area, all states and union territories have been covered in this survey. Textbooks used in special types of institutions have not been included. Textbooks used for preuniversity courses are also excluded though the intermediate textbooks for higher secondary schools and intermediate colleges of Uttar Pradesh are included. The following techniques have been used for collecting data: (i) questionnaire—replies to which were elicited personally by research staff; (ii) interview—with authorities on additional points cropping up from the questionnaire; (iii) reference to documents and files available with the authorities concerned; and (iv) individual examination of books on a prescribed schedule.

The findings of the survey were as under. The survey revealed that mother tongue is the language being taught at primary level. At the high school stage regional languages get priority over mother tongue. In addition to first compulsory lan-

guage, the pupil has to study more than one language. Duration for which the languages should be studied also varies from state to state. Second, third or the fourth languages are usually modern Indian languages, modern European languages and the classical languages. Hindi and Urdu are provided at almost all the school stages while English is provided at the middle and secondary stages in almost all the states.

Except Haryana and Punjab among the states and Himachal Pradesh and Tripura among the union territories, all other states and union territories have more than two media of instruction.

There is no uniformity in the introduction of textbooks at the primary stage in different subjects in the states and union territories except in mother tongue. Textbooks in mother tongue are introduced in the class I in all the states and union territories. In Kerala, there is no other textbook, except of the first language, at the primary stage while in Assam and Bihar, an arithmetic textbook is also introduced. At the middle and secondary stages, textbooks are generally provided in almost all subjects in all the states.

In all other states except Andhra Pradesh and Kerala, both nationalised and approved textbooks are used at the school stage. In most of the states nationalisation of books is looked after by an officer in the department of education, but in some states it is done by semi-autonomous bodies and bodies under the registered societies. They function only at primary and middle levels while for secondary education, university boards of education and departments of education produce books in many languages.

The state control of textbooks, with a phased programme, was first initiated in Uttar Pradesh in 1942, although a special officer for textbooks was appointed in 1948. The last state to complete the chain was Gujarat, during 1969.

Each state or union territory has evolved its own procedure for preparation, review and editing of the nationalised textbooks, and also of approval of textbooks other than the nationalised ones. At the moment, in almost all the states and union territories, there are textbooks in use which are not nationalised. For the nationalised textbooks, writers and reviewers, both, are paid. Rates and methods of payment differ from state to state.

In Andhra Pradesh and Tamil Nadu, all nationalised textbooks are printed at government presses only, while in others, it is undertaken by

private presses also. Generally, the prices are fixed on "no profit no loss" basis but in some states they are sold at a profit ranging between 10 percent and 16 percent.

The total number of textbooks in use in schools, according to this survey, is 12,12912. Of these, 6,552 are for the secondary stage. Out of the total books, 924 are nationalised. The total number of translated versions is 601. Of these, 427 are nationalised. The cost of a complete set of books for classes I to V varies from Rs. 7.35 for twenty books in Jammu and Kashmir to Rs. 22.51 for twentythree books in Bihar. About 54 percent of the authors are postgraduates and about 15 percent are with doctoral degrees, whereas some (4.3 percent) are undergraduates. About 70 percent of the recommended books have been written in the state/regional language of the state/union territory. In case of persons with low academic qualifications, the proportion of nonrecommended books is higher than that in case of individuals with high qualifications.

716. *FUSTER, J.M., Sex Education—A Survey, St. Xavier's College, Bombay, 1971.*

A. The study aimed at comparing aspects of sex education of two samples drawn in 1958 and 1970.

The samples of 1958 and 1970 consisted of girl students of St. Xavier's College, Bombay. The first sample included 319 girl students from the first year to the senior B.A. and B.Sc. classes. The girls' ages ranged from fifteen years to twentyseven years, but the majority were in the sixteen to nineteen age group. In 1970, a similar sample of 280 girls was picked up, but the ages ranged from fifteen years to twenty years with clustering (88 percent) between sixteen and seventeen years. A questionnaire was developed covering different facets of sex education and was administered to both the samples.

Following were some of the findings of the study. Teachers appear to have made headway in imparting sex education (the facts of life) to their students and students' preference for teachers as instructors has shown a notable increase. The analysis of 1970 data showed that Parsi mothers in the group under study scored above Hindu and Muslim mothers in imparting sex education to their daughters.

B. The second part of the study aimed at studying some aspects of sex education in case of boys only.

In 1970, a sex education questionnaire, consisting of six questions, was administered to 340 boys—all of them were first year students of St. Xavier's College, Bombay. Their ages ranged from 15 years to 23 years.

The study revealed that most of the boys who responded were not provided with any sex education by their parents, rather, friends were the primary and main source of information about sex education. Most of the boys preferred teachers to provide sex education. Books, doctors and priests were other sources of sex education.

Analysing the responses of 886 girls and 501 boys from the colleges of Bombay, it was found that there was a great similarity between the girls' responses and those of the boys. A second striking feature was the radical change in Indian tradition seen in these college students who preferred love marriages, intercaste and inter-community marriages.

717. *KHANNA, P.N., A Survey of Source Materials in Filmstrips and Books on Audio-visual Education, NCERT, New Delhi, 1970.*

The purpose was to collect the sources from which films, filmstrips and books on audiovisual aids can be obtained and then to prepare a guide book for the use of students and teachers of teacher training institutions, teachers in service, State Audio-visual Education Officers and others organising the audiovisual programmes.

The available materials were classified under art, communication, craft, films, filmstrips and slides, graphics, mechanical aids, printing, photographs, puppetry and creative art, radio and TV, sculpture and theory.

Under each of the above categories, a list of films and filmstrips together with synopses and lengths, was prepared. The books were listed with the name of the author, publisher and the date of publishing. The sources from which films, filmstrips or books would be available were also mentioned.

718. *MAHARASHTRA STATE BOARD OF SECONDARY EDUCATION, A Survey of the Teaching of English and Hindi in Secondary Schools, Poona, 1964.*

The major objectives in undertaking the survey were: (i) to collect relevant data regarding the

academic and training qualifications of teachers in the two important subjects—English and Hindi—as a basis for consideration and suggesting measures of improvement in respect of the syllabus, methods of teaching, qualifications of staff, standard of attainment, etc., at the S.S.C.E. level; (ii) to elicit opinions or views of heads of schools regarding the academic and/or administrative difficulties in respect of the teaching of English and Hindi; and (iii) to invite concrete suggestions for more effective teaching of the two subjects with a view to improving the S.S.C. examination results.

The survey throws light on the points of issue. Generally speaking, the present position of schools with respect to the percentages of trained graduate teachers incharge of these two subjects—English and Hindi—is far from satisfactory. The percentages of graduate teachers, with English (either at M.A. or B.A.) and Hindi (either at M.A. or B.A.) are only 45.8 and 41.4, respectively. Again, the percentages of trained graduates, i.e., M.A. (with English) B.T. B.Ed. and B.A. (with English) B.T. B.Ed. and M.A. (with Hindi) B.T. B.Ed. and B.A. (with Hindi) B.T. B.Ed. are still lower, i.e., 31.9 and 22.2, respectively. There is also a large proportion of non-graduate teachers (English 17 percent and Hindi 45 percent) who are placed in charge of teaching both the subjects to standards X and XI. So far as the second objective of this study is concerned, the data collected has been very extensive and also very useful. The analysis of the replies very clearly brings out the following main academic and administrative difficulties experienced by heads of secondary schools in respect of teaching both the subjects: (a) paucity of trained and experienced teachers, (b) inadequate time for teaching the subjects, (c) low standard of pupils owing to poor teaching in primary schools, and (d) heterogeneous and over-crowded classes. In addition to the above four difficulties, the headmasters have stated that the optional character of the English subject, lack of interest and effort on the part of pupils, unsuitable atmosphere for teaching the subject, defective textbooks, unsuitable methods of teaching, etc., are also some of the reasons for the present lowering of standard of English. Regarding the third objective of the survey, the consolidation of replies provides many useful and concrete suggestions for more effective teaching of the two subjects.

A few important suggestions given by more than 50 headmasters are stated below: (i) English should be compulsory for standards V to

XI; (ii) teaching of the subject should be entrusted to experienced and qualified teachers; (iii) more emphasis should be given to grammar, spelling, comprehension, written work, etc.; (iv) teaching of English in primary schools should be entrusted to experienced and qualified teachers; (v) seminars, refresher courses, workshops, training courses, etc., should be organised for teachers; (vi) periods allotted for the subject should be increased; (vii) graded textbooks should be provided and the textbooks should contain sufficient notes for the guidance of teachers; (viii) appropriate and correct methods of teaching the subject should be adopted; (ix) well-equipped libraries should be made available to candidates; (x) the teaching of Hindi should be entrusted to trained and experienced teachers; (xi) stress should be laid on grammar, recitation, written exercises, and oral work in the subject; (xii) graded textbooks should be provided and the textbooks should contain sufficient notes for the guidance of teachers; and (xiii) supplementary reading should be encouraged.

719. *MAHARASHTRA STATE BOARD OF SECONDARY EDUCATION, A Survey of the Teaching of English and Hindi in Secondary/Higher Secondary Schools in Nagpur and Aurangabad Divisions, Poona, 1966.*

The major objectives in undertaking the survey of teaching English and Hindi in secondary/higher secondary schools in Nagpur and Aurangabad divisions were: (i) to collect data regarding academic and training qualifications of teachers teaching the two subjects, (ii) to elicit opinions regarding academic and/or administrative difficulties experienced by the heads of schools in teaching the two subjects and (iii) to obtain concrete suggestions from them for more effective teaching of the two subjects with a view to improving the S.S.C./H.S.S.C. examination results.

The survey proforma was sent to 1,254 schools but only 684 schools supplied the basic data for the survey. The survey throws much light on the above points.

Generally speaking, the present position of schools regarding the percentages of trained graduate teachers teaching the two subjects, English and Hindi, is far from satisfactory. The data reveal that the percentages of graduate teachers with English either at M.A. or B.A. level are 40 for the Nagpur

division and 28 for the Aurangabad division, the corresponding percentage in the Poona division being 46. The percentages of trained graduates (M.A. with English, B.T./B.Ed., B.A. with English, B.T./B.Ed.) are still lower, viz., 26 for the Nagpur division and 17 for the Aurangabad division, as against 32 percent for the Poona division. The percentages of graduate teachers with Hindi either at B.A. or M.A. are 39, 24 and 41 for the Nagpur, Aurangabad and Poona divisions, respectively. The percentages of trained graduate teachers (M.A. with Hindi, B.T./B.Ed. and B.A. with Hindi, B.T./B.Ed.) for the three divisions are 26 (Nagpur), 14 (Aurangabad) and 22 (Poona). There is also a larger number of undergraduate teachers who are entrusted with the teaching of both subjects in the top two standards. Their percentages are as under: for English—Nagpur 31, Aurangabad 31, Poona 17 and for Hindi—Nagpur 41, Aurangabad 61, Poona 25. As for the method of teaching English, the survey reveals that while the schools in the Nagpur and Aurangabad divisions prefer 'direct' and 'translation' methods, the schools in the Poona division prefer 'direct' and/or 'structural' methods. The classification of schools according to various methods of teaching Hindi reveals that there is a general preference for the use of 'direct' and 'translation' methods for teaching this subject in all the three divisions. As regards the second objective of the study, viz., academic and administrative difficulties experienced by the heads of secondary schools, it is seen that the difficulties, in order of frequency, showed some difference in the three divisions. Some of the common difficulties faced by the three divisions are: (a) dearth of experienced and qualified teachers, (b) poor knowledge of grammar and composition of the mother tongue, (c) low standard of pupils due to poor teaching in primary schools and (d) low standard of pupils coming from rural areas. Coming to the third objective of the survey, the consolidation of replies provided many useful and concrete suggestions for more effective teaching of the two subjects. Here also, it is seen that the suggestions offered by the headmasters of schools in the three divisions are slightly different from one another. However, a few important and common suggestions made by heads of schools in all the three divisions are: (i) teaching of the subjects should be entrusted to experienced and qualified teachers; (ii) more emphasis should be given to grammar, spelling, comprehension, written work, etc.; (iii) seminars, refresher courses, workshops, training courses, etc.,

should be organised for teachers and (iv) appropriate and correct methods of teaching the subjects should be adopted.

720. MEHRA, C., *National Survey of Elementary Teacher Education in India*, NCERT, New Delhi, 1970.

The purpose of the survey was to make an assessment of the existing position of all the aspects of elementary teacher education in the country.

A questionnaire covering all the aspects of elementary teacher training was prepared. It covered nine aspects related to general information, student body, staff, instructional programme, building and equipment, inspection and supervision of training institutions, finance, plan for development, and miscellaneous. A manual of instructions was also prepared. The data were collected with the help of State Institutes of Education from the respective states except in case of Bihar for which the data could not be collected. Out of the total 1548 institutions, only 1168 institutions responded. Out of these 1168 institutions, 1095 belonged to different states and the rest to union territories. Data were tabulated statewise.

Some of the salient findings are as under. The quality of teacher education deteriorated on account of the expansion; the number of such institutions went up to 1548 in 1965 from 1081 in 1960. Except in Gujarat, Madras and West Bengal, the majority of such training institutions in other states were located in urban areas. No uniformity in the level and type of training was found. The courses could be categorised into four groups: (i) one year post-middle, (ii) two year post-middle, (iii) one year post-matriculation higher secondary, and (iv) two year post-matriculation higher secondary. The reasons given for variations were rapid expansion of primary education, nonavailability of matriculate candidates in backward areas, paucity of women teachers and low pay scales. Little attention was paid to minimum admission requirements for training institutions. The age of teachers under training ranged from 15 to 30 years. Except in Kerala, Madras and Mysore, not much attention was paid to academic background or personality traits while recruiting the candidates. They were recruited simply because they were deputed by their schools or selected in the interview. The syllabus for the trainees was

prescribed by the state departments of education. The institutions were not well-equipped with teaching aids for different programmes, hence the only method that prevailed was the lecture method. In-service education and extension service programmes were largely ignored. The assessment scheme needed a lot of improvement. Most of the institutions were poorly staffed. Most of the staff members had no experience of teaching in primary schools. The inspection and supervision of these institutions was generally done by the education officers or the district inspectors.

721. *MINISTRY OF EDUCATION, Report of the All India Educational Survey, Govt. of India, New Delhi, 1960.*

The chief objective of the survey was to collect and collate data and to identify and enumerate the habitations or 'population centres' so that an integrated picture of their size, etc., could be made available. It was purely a fact-finding job—the preparation of a blue-print for the location of schools by collecting facts and figures from all possible sources. Its coverage was so extensive that no village or hamlet was disregarded. The survey was restricted to the study of only certain specific problems of administration of primary and secondary education, and to the collection of data that would be useful to state governments in formulating their plans and programmes of expansion of educational facilities for implementing the directive principle of the State's policy enunciated in Article 45 of the Constitution.

The survey attempted to identify each district habitation as on 31st of March, 1957, and to enumerate each one of them, systematically, in a 'Habitation Register' and also to classify them according to their population slab and to register them in a 'Slab Register' with an entry regarding the existing educational facility and then to delimit the school areas of existing schools according to certain objective criteria laid down and applied with reasonable discretion and to suggest the most convenient and economic location of the schools for the habitations remaining unserved, so that as many children as possible from the neighbouring habitations could take advantage of it by walking not more

than a certain specified distance at the primary, middle and high school stages and thus to delimit the school areas of the existing and the proposed schools and to map them out and to enumerate them suitably in a 'School Area Register'. The objectives of the survey can, therefore, be stated in brief as (a) identification and enumeration of (i) every distinct habitation and (ii) every elementary school, (b) mapping out the location of schools, (c) delimiting the area served by the existing schools, (d) deciding on the convenient location of new schools and the area that would be served by the proposed new schools, by suitable classification and grouping of habitations and (e) preparation of district-wise statistical tables showing the results of the survey. Thousands of village officers, the patwaris and the teachers supplied the basic data that assisted in identifying and enumerating the habitations. Cooperation of other departments was also secured. Hundreds of informal meetings with the patwaris, teachers and officers of the education and other departments at the 'taluka or block' headquarters helped in resolving doubts and in finalising the data.

The following are some of the salient revelations of the survey. On 31st of March 1957, out of 8,40,033 habitations with a population of 27,95,50,946, only 2,29,023 habitations (forming 27.26 percent of the total) with a population of 16,70,44,295 (forming 59.76 percent of the total) had a school in them. If the schools were to serve only the habitations in which they were located, 6,11,010 habitations forming the remaining 72.74 percent of the total number of habitations would consequently require to be treated as without any educational facility. Their population, however, formed only 40.24 percent of the total rural population. A large majority of them being thus comparatively smaller habitations, in the present circumstances it would be impossible and unadvisable to have separate schools in them. All habitations with a population between 300 and 500 within about half a mile's walking distance from the existing schools and those with a population below 300 within about one mile's walking distance from existing school, in rural or urban areas, were included in the school area. As a result of this grouping, smaller habitations with a total population of 65,25,57,397 would be catered for. They form 44.16 percent of the total number of habitations and 23.34 percent of the total population. Of the 2,29,023 habitations with a school in

them, 1,04,727 forming 12.47 percent of the total number of habitations, with a population of 9,12,12,677 forming 32.63 percent of the total population, were what are termed in this survey as 'Independent Schools' which depended for their strength on their own school-going population and no other. The remaining 1,24,296 habitations could serve, besides themselves, the neighbouring 3,70,962 habitations, and as such, the schools in them are termed in this survey as 'Group Schools'. Besides the independent and group schools, there were peripatetic teacher schools which served 944 school areas where the habitations were so small as not to form even the requisite minimum total population to justify the appointment of a single teacher. Of the 2,359 small habitations served by peripatetic teacher schools, 1,888 had the peripatetic teacher centre in them and children in 471 had, as in the case of habitations tagged on to a group school, to walk some distance. Of the 4,92,899 habitations served by group schools, 1,22,408, i.e., 14.57 percent of the total number of habitations had one or more schools located in them; 1,74,821 forming 20.81 percent of the total number had one within half a mile, 1,76,999 forming 21.07 percent had it at a distance greater than half a mile, but less than one mile and 17,444 forming 2.08 percent had one at a distance greater than one mile, but less than one and a half miles, and 1,227 forming 0.15 percent of the total had one at a distance slightly greater than one and a half miles. Of the 471 habitations served by peripatetic teacher schools, 234 were served within half a mile, 222 within one mile, 14 within one and a half miles and one within two miles. Those having the facility of a peripatetic teacher school in them formed only 0.22 percent of the total and the others tagged on to them formed 0.06 percent of the total number of habitations. In all, 5,99,985 habitations, i.e., 71.42 percent of the total number of habitations with a total population of 23,23,01,692 forming 83.1 percent of the total population could take advantage of the existing location of schools, they being within the habitations or in adjoining habitations within walking distance of the child, and not ordinarily exceeding one mile. Hence, on the whole, 28.58 percent of habitations, with 16.90 percent of the total population were not being served by the existing schools. As regards the proposed schools, 'independent' schools have been proposed in 45,234 habitations and 'group' schools have been proposed so as to serve, in all, 1,88,664 habitations. Some of

these would have the schools in them and these schools would be serving the other adjoining habitations. Peripatetic teacher schools have been proposed to serve, in all, 13,606 habitations. Considering the proposed extension of facilities, the emerging picture would be as follows. The number of habitations served by independent schools would rise from 1,04,727 to 1,50,215 forming 17.88 percent of the total number of habitations. As regards the habitations to be served by group schools, their number would rise from 4,92,899 to 6,48,860. As many as 13,602, i.e., 1.62 percent of the habitations, would be served by peripatetic teacher school centres located in the habitations or in the adjoining ones, within walking distance of the child, thus giving a net increase of 11,243, the percentage having increased just by 1.34. As a result of these proposals, the total number of habitations that would be served, by one or more schools either in them or in the vicinity would be 8,12,677 out of 8,40,033, providing educational facilities to 96.7 percent of the total number of habitations, leaving out 27,356 habitations which form 3.3 percent of the total number of habitations. The data collected in regard to every school, as on 31st March, 1957, lends itself to a number of valuable studies. At the primary school stage, 176.24 lakh children were enrolled. Of these, 127.73 lakhs were boys and 48.51 lakhs were girls. On an average, there were 34 pupils per teacher, the pupil-teacher ratio in different states varying from 41 in Assam to 24 in Himachal Pradesh. Of the pupils enrolled, 72.47 percent were boys and 27.53 percent were girls. In the 2,812 towns and cities, in all, there were 2,541 institutions giving education at the primary school stage, of which 5,132 were for girls only. Provision for education at the middle school stage was available in 26,267 habitations, forming 3.13 percent of the total number of habitations. There were 32,508 schools teaching at the middle school stage in these 26,267 habitations. In the urban areas, information regarding the number of girls' schools was not available from certain places. From what was available, it was gathered that the number of girls' schools was 2,892 out of 11,230 institutions providing education at the middle school stage. Of the 32,55,013 scholars enrolled, 28.59 percent were girls and the remaining were boys. Facilities for education at the high school stage existed in 4,500 habitations. There were 4,956 institutions teaching at the high school stage. In them, there were 45,608 teachers.

722. *MINISTRY OF EDUCATION AND YOUTH SERVICES, The Spread of Girls' Education in Mehsana District, A Sample Survey, Govt. of India, New Delhi, 1970.*

With a basic understanding of the need and importance of girls' education, this study made a survey of the position as is obtained in the field of girls' education.

As a sample, Mehsana district in Gujarat was selected for this survey. Based on some criteria, thirtythree villages in the district were involved. A questionnaire, which had to be filled in by the head of the family, was prepared. It had four sections: the first section pertained to general information, the second related to the home and the family, the third related to the economic condition of the family, and the fourth invited the views of parents on girls' education in general.

Some of the salient findings of the survey are: (i) practically in all the villages, except one, there is a primary school; (ii) in about one-third of the villages under survey there are secondary schools with classes upto standard XI; (iii) of the pupils studying in primary schools, 41.2 percent are girls; (iv) in Kot, not a single girl goes to school, while in Navota only three girls are studying with 100 boys in the school; (v) there are girls of the compulsory age group but not going to school in 3,462 families of the thirtythree villages surveyed; (vi) out of 2,130 girls of the compulsory age group but not studying now, 1,150 girls have studied upto standard I, 278 girls upto standard II, and 234 and 232 girls upto standards III and IV, respectively; (vii) as many as 5218 families are such where one, two, three or more female members are quite illiterate and in 8376 families, one, two, three, or more male members are quite illiterate; (viii) the majority of the girls are in the age group 7-14 and not studying; (ix) it is only in 533 families that the girls of compulsory age group do not go to school but earn; and (x) the five reasons for nonattendance, in order of frequency, as rated by the heads of families are (a) economic difficulty, (b) girls are required to take care of the young ones in the family and to help in household work, (c) in one community girls do not study much, (d) it is very difficult to get educated bridegrooms for the educated girls, and (e) importance of educating the girls is not realised.

723. *MURTHI, V. B., Library Service in Secondary Schools in Madras State, The SITU Council of Educational Research, Madras, 1964.*

The objectives of this study were (i) to ascertain the nature and extent of library services and the facilities available at present in secondary schools; (ii) to determine the facilities a secondary school should have for effective service and (iii) to indicate the ways and means of improving the existing service conditions within a reasonable time limit.

The information was collected through a questionnaire which was sent to the headmasters of secondary schools. This was supplemented by observations of libraries and library service and by interviewing the headmasters, teachers, librarians and pupils. Madras city, to represent urban area, and Chingleput district, to represent rural area, were selected in the state of Madras for this study. Fortysix schools answered the questionnaires, which formed roughly 20 percent of all the secondary schools in the areas selected. These institutions were considered to be representative of all types of managements.

The findings revealed that (i) stocks of the books, periodicals and reference material are quite inadequate and the number of books added to the library, annually, is very small; (ii) the number of books per student in the library is only six; (iii) most of the school libraries do not have qualified librarians; (iv) barring a few cases, the libraries are not generally kept open on all working days during school hours; (v) half the libraries do not have special rooms for book collection; (vi) issue of books to students is not much in evidence; (vii) lack of space for library and absence of a trained librarian reduces interest; (viii) classification and cataloguing of books needs greater attention; (ix) no provision is made in the school time table for library work; (x) most of the schools claim that they create a proper library climate in the classroom itself by giving instruction; (xi) very few schools receive government grant for the library and whatever fees is collected from the students for the library, is spent on purchase of new books; and (xii) no school has separate budget for library.

724. *PANDEY, B. N. Second National Survey of Secondary Teacher Education in India, NCERT, New Delhi, 1969.*

The survey was designed to have information

about the graduate teachers being prepared in the country during the year 1964-1965 with a view to helping administrators and planners in improving the quality of postgraduate teacher education.

A detailed questionnaire was prepared to collect information about the institutions, their institutional programme, resources, financial position, and position of research and publications in them. All the institutions preparing graduate teachers in the country were included in the survey. Data from 231 institutions from all over the country were collected. Investigators also interviewed the principals, staff and students for the purpose.

The survey revealed the following findings. In April 1965, there existed 273 teacher training institutions in the country with Uttar Pradesh having the highest and Kashmir the lowest number of institutions (fiftysix and four, respectively). As many as 222 training colleges came into being during the period from 1948 to 1964 as against 51 that were opened during the period 1886 to 1947. Majority of the training colleges (75.5 percent) were residential or partly residential. Seventyfive percent teacher training institutions were non-Basic, seventyeight percent were coeducational and 87.5 percent were located in urban areas. About sixtyeight percent institutions were exclusively for teacher preparation while the rest were either the sections of degree colleges or the departments of universities. Only thirtyfour percent were government colleges. Total student enrolment during the year 1964-65 was 25,264 with a per capita expenditure of Rs. 568 per annum. Majority of these institutions were affiliated colleges. Only ninetyone out of the total sample were equipped with facilities for in-service education through their extension centres and units. As far as the output and wastage of these institutions was concerned, 88 percent of the students passed during the year 1963-64, and an increase of four percent in case of male, and six percent in case of female candidates was recorded in the year 1964-65. The highest output in school subjects was recorded in English and lowest in Fine Arts. In terms of major fields, the credit of maximum output went to social sciences followed by regional languages and the least to Fine Arts. A wastage of 14 percent was recorded during the year 1963-64 and 16 percent during the year 1964-65; Assam was the state with highest rate of wastage. About 13 percent and 14.8 percent of the total seats sanctioned for admission to M. Ed. remained unutilized for the years 1963-64 and 1964-65, res-

pectively. Seventyfive percent institutions put emphasis on or weightage to practical work. The number of compulsory theory papers prescribed for B. Ed. in different universities ranged from three to seven. There were one or two optional papers in addition to the compulsory ones. Almost 130 colleges prescribed specialization courses either in school subjects or special fields. About the medium of instruction and examination at B.Ed. level, ninety-nine colleges had English and sixtyseven had regional language as the medium. On an average, the working days during the period covered by the survey ranged between 167 and 195. The assessment was both internal and external. Marks allotted to theory papers ranged from 300 to 800. Majority of the institutions had provision for materials, cocurricular activities and publications. Most of the institutions prescribed two subjects for school teaching and the number of lessons to be taught varied from ten to forty. The number of practising schools selected for practice teaching programme ranged from one to eight in respect of states and two to twentyeight in respect of union territories. Number of supervisors for supervising practice teaching lessons varied from four to fortyfive and the number of student teachers under concerned supervisors varied from eight to twentyfour. Only fiftyone percent private and twentyeight percent government institutions had their own buildings. Seventysix percent of them had college hostels while about sixtyone percent had staff common rooms. The largest number of audio-visual aids were gramophone records followed by filmstrips. The teacher-pupil ratio was 1:10 and total number of teacher educators was 2,543. Only 5.1 percent were Ph.D.s while 31.76 percent were M.A., M.Ed.s. The highest percentage was of those who had M.A., B.Ed. Teacher educators had three types of workload, viz., teaching, supervising and guidance. Teaching and supervising workload was heavier in case of lecturers and method masters while that of guidance was heavier in case of readers and professors. Majority of college lecturers possessed teaching experience both at the college and school levels. A lot of variation existed in the pay scales of different categories of teacher educators at different stages and under different managements.

725. PATANKAR, N. V., *Survey of Children's Literature and Educational Literature in Marathi, SIE, Poona, 1971.*

The survey was undertaken to study the gen-

eral nature of the two types of literature and to pinpoint the limitations, if any, and to identify areas not adequately covered and topics omitted.

This study was divided into two parts, one for children's literature and the other for educational literature. Nearly 3000 books of various types of children's literature were screened. The survey revealed that: (i) the quantity of literature available for very little children is scanty and unsatisfactory in quality; (ii) the literature for later childhood period is stereotyped, language is difficult and clumsy and the publishers are guided more by commercial and less by academic motives; (iii) vast is the literature for pre-adolescents but it lacks language, quality and variety; as far as the literature for adolescents is concerned, the intellectual level is not maintained; (iv) the literature is not realistic and does not elevate the emotional life of the children; (v) literature for pre-adolescent group lacks the spirit of national integration but is loaded with more history and mythology. Regarding the educational literature, the findings were: (a) the total number of books is very small in comparison to the area and size of the population of the state; (b) many books published during 1840-1920 are out of print; (c) number of books on subjects like university education, female education, teaching of technical subjects, etc., are very few; (d) books on philosophy, educational psychology, etc., are written mainly for examination purposes and lack a modern outlook; (e) no guidance literature is available for educationists and teacher educators.

726. *SHAH, M. R., SHUKLA, N. N., RAMACHANDRAN, K. V., DESHPANDE, P. A. and APTE, S. V., A Survey of School Children in Bombay City with special reference to the Physical, Physical Efficiency, Mental and Nutritional Status, Psychological Research Institute, Gujarat Research Society, 1968.*

The main aim of the study was to obtain base line data on school children in Bombay city.

Schedules, physical efficiency tests and an intelligence test (non-verbal performance) were the tools used for collecting data. Data were categorised as (i) socio-economic, (ii) anthropometric, (iii) physical efficiency, (iv) nutritional and (v) non-verbal performance. Data were analysed and interpreted.

Some of the major findings of the study were as follows. (i) Children performed below par in all tests for which comparable data were available. (ii)

Non-municipal school children were better than their municipal school counterparts. (iii) Poor performance of the children in the tests might be due to the fact that interests and initiative were not properly inculcated by the schools.

727. *SIE (Gujarat), A Survey of all the Primary Teachers' Training Institutions of Gujarat State, Ahmedabad, 1969.*

The purpose of the study was to know the present position of all the primary teachers' training institutions and to plan a programme for the improvement of these institutions.

The sample consisted of seventy primary teachers' training institutions. The necessary information was obtained through a detailed questionnaire prepared by the Teacher Education Department of NCERT. Percentages and means were computed for interpreting the data.

Some of the important findings of the study were: (i) All the teachers' training institutions of Gujarat State had adopted basic pattern. (ii) Sixty percent of the staff members were G.B.T.Cs., i.e., basic trained. (iii) Laboratories and libraries of these institutions needed enrichment. (iv) All the institutions adopted the same type of evaluation procedure. (v) Different institutions had different type of system for practice lessons.

728. *SINGHA, L., A Survey of Craft-education in the Higher Secondary Schools and Teachers' Colleges in West Bengal, Department of Woodwork, Viswa Bharati U., 1967. (UGC financed)*

The study aimed at (i) tracing the growth of craft-education in the state of West Bengal, (ii) surveying the present position of craft-education in the higher secondary schools and teachers' colleges of West Bengal with regard to teachers' qualifications, equipments, materials used and time devoted, (iii) finding out how far the recommendations of the Mudaliar Commission for craft-education were implemented in the state of West Bengal and (iv) comparing the craft-education provided in the secondary schools with that of Kalanabagram.

The study was conducted on a sample of 400 higher secondary schools and six teachers' colleges. A questionnaire with items on time devoted per week to practical work and theoretical classes, equipment, maximum and minimum number of students

in the class, qualifications and grade of the craft teachers, articles produced, expenditure per year, record of work and method of evaluation, was prepared. The first part of the research, being a descriptive one, dealt with the contribution of Tagore, Gandhi, their institutions, National Council of Education, Nari Siksha Samiti, Saroj Nalini Nari Siksha Samiti, etc., to craft-education. The collected data were analysed and comparisons were made between boys' and girls' schools. The investigator visited ten schools for personal verification.

It was found that (i) craft was introduced in all the sampled schools of West Bengal; (ii) in most of the schools craft was taught in classes VI to IX and only in a few schools it was taught upto class IX; (iii) the condition of craft-education was far from satisfactory, absence of properly trained craft teachers, low salary, absence of a well-planned programme, over-crowding in the craft class, dearth of equipment, raw material, etc., were some of the common difficulties; and (iv) craft education in the Vinaya Bhawan (Viswa Bharati Teacher's College) was satisfactory, eight hours per week being devoted to craft-education covering both the theoretical and practical aspects.

729. *St. XAVIER'S INSTITUTE OF EDUCATION, A Survey of the Montessori Classes in Bombay, Bombay, 1970.*

The objective of this investigation was to study the impact of Montessori movement in education, the extent of its influence, and its popularity.

Fortynine Montessori classes from Greater Bombay were visited. A proforma to collect information about the establishment, medium of instruction, enrolment, training of the staff, and Montessori apparatus, was prepared.

The survey revealed that among the fortynine classes visited, one was established as early as 1905 and two as recently as 1969. Most of the schools have English as the medium of instruction. Only a few have Marathi and Gujarati as media. The overall enrolment is 5339. There are 240 teachers and sixtyfour helpers. Only 150 teachers are Montessori trained. Thirty seven schools have reported the use of original apparatus while twelve use the modified ones. The special difficulties faced by the schools are due to lack of trained personnel, high teacher-pupil ratio, and the lack of understanding of Montessori method by the public at large, and parents in particular.