

# OCCASIONAL PAPERS



Research in Educational  
Administration : Retrospect  
and Prospect

N.M. Bhagia

NATIONAL  
INSTITUTE OF  
EDUCATIONAL  
PLANNING AND  
ADMINISTRATION

NIEPA Occasional Paper

③

Research in Educational  
Administration : Retrospect  
and Prospect

N.M. Bhagia

NATIONAL INSTITUTE OF EDUCATIONAL  
PLANNING AND ADMINISTRATION  
17-B, Sri Aurobindo Marg  
New Delhi - 11 00 16  
(India)

NIEPA 1983

The opinions expressed in the Paper  
are those of the authors and do not  
necessarily represent the views of  
the Editorial Board or of the NIEFA.

N.M. Bhagia

A B S T R A C T

The paper reviews research trends and developments in the field of Educational Administration and points out gaps and areas which so far have been neglected. Serious research efforts in educational administration in India began in the early fifties when studies on educational structures, the roles of the Central, the state and the local authorities, school inspection and educational finance were conducted. The shift from maintenance-oriented studies to development-oriented studies is clearly discernible in the last two decades during which studies on leadership behaviour in education, organisational climate, various problems of educational management, innovativeness and change in education etc. were taken up. Notwithstanding this welcome shift, some areas have still remained unexplored. The paper, therefore, emphasises the research needs in the areas of role-performance of educational administrators at various levels, profiles of educational administrators, university level administration, non-formal and adult education, private enterprise, management of co-curricular studies, management of examinations, student and teacher associations, management of time, management of change, training activities and material-development for educational administrators.

1. Introduction

Research in educational administration in India, in its real sense, is only about thirty years old. Though it had its beginning in the early years of this century, and in the forties researches were taken up by J.P. Naik and K.V. Parulekar, such attempts were rather sporadic. Serious attempts in this field, however, became discernible in the fifties with the advent of all India surveys by the governmental agencies and doctoral dissertations in the universities.

Two distinct trends are discernible in the research studies of this period. In the first half of the three decades from 1951 to 1965, the dominant trend had been to study the educational structure and the role of authorities and agencies at different stages of

education in historical and comparative perspective. Most of the work done during that period is related to the study of organisational structure, rules and regulations, inspection, control and finance etc. On the other hand, a number of researches completed in the latter half are related to leadership behaviour in education, organisational climate and human relations approach. The difference is also noticed in terms of methodology and treatment of data. In place of use of descriptive and aggregate compilation approach prevalent in the early period, the treatment now tends to be more analytical and interpretative. Statistical designs and case study methods have also been used during this period. Case studies of some educational organisation as a whole including the processes of administration such as planning, organising, direction, communication, and evaluation have also been conducted.

The doctoral and project level studies conducted till 1976 are documented by Such (1974 and 1975). Several studies have been listed and briefly described in the field of Educational Administration in the two Volumes. Here I have picked up some of them, reclassified them and also added the studies which have appeared in professional journals in this area. This exercise has been attempted in order to give the readers a flavour of various kinds of researches done in the field. The exercise would also enable us to determine priorities for future research in the field.

The researches conducted during the three decades may be classified in five main categories; (i) educational administration at different levels, (ii) administrative problems at various stages of education; (iii) leadership behaviour & organisational climate, (iv) inspection and supervision, and (v) innovations and change.

## 2. Administration at different levels

Education in India is administered at central, state, and local levels. At the local level we have district school boards in rural areas, and municipal boards in urban areas. Madhuri Shah (1951) in her pioneering study on the problems of administration of education in India, examined the role of the centre, the states and local bodies in education in historical and comparative perspectives three decades ago. More than a decade later Vyas analysed the factors which influenced the judgement of the central government from time to time and identified the principles and practices underlying them. Around the same period, Singh (1964) found little coordination between the efforts of the central and the state governments and suggested a

### 3. Administrative Problems at different stages

Some administrative problems require continuous attention by the concerned authorities on priority basis. Universalisation of primary education due to the constitutional obligation, managing adolescents' problems at the secondary stage and student-unrest at the tertiary stage conspicuously belong to this category of problems.

At the elementary stage, researchers have given attention to the twin inter-related problems of compulsory primary education and wastage and stagnation. Desai (1951) studied the history and problems of compulsory primary education very elaborately. The Bombay Municipal Corporation (1956 - 1958) conducted a number of surveys which covered various dimensions of the problems of compulsory education e.g. the extent and causes of the failure of compulsory age children to join school, the magnitude of non-attendance of children and the factors thereof in various localities in Greater Bombay, etc. The Ministry of Education (1970) sponsored a project to study the spread of girl's education in one of the districts of Gujarat and the main reasons for their non-attendance in schools. Several investigators have studied the problem of wastage and stagnation at the primary level. The space doesn't allow mention of all those names recorded in the Survey of Educational Research. The studies have identified a number of major causes and factors associated with wastage and stagnation. Generally, it has been found that the wastage is relatively more in rural schools among backward communities, among girls in more distant villages, and in early stages of education.

Few studies have concentrated on finding solutions to the problems. Three studies of this nature may be mentioned. The Bombay Corporation (1966) studied the problems of organising parallel classes for failures and under-achievers in different subjects in primary classes with a view to reduce the incidence of stagnation on one hand, and to raise the standard of achievement on the other and suggested that the parallel classes could advantageously be started in classes I to III. One experimental study by Gupta (1974) pointed out that the ungraded school system considerably lessens the dropout rate. Another study by Roy & Kath (1972) found that mid-day meals attracted higher enrolment in lower primary schools, in general, and tribal schools in particular.

The National Institute of Educational Planning and Administration (NIEPA), conducted an empirical study which includes an inquiry into

better partnership between the centre and the states. Sharma (1964) on the basis of his study of educational administration at the state level pleaded for decentralised democratic administration.

Under the Constitution of India, state governments are basically responsible for administration of education excepting certain items included in the central list. The role of centre, researches suggest, has been ever increasing. Baker (1976) for example, studied the role of the centre in relation to states in financing of education and educational planning and suggested that disciplines like law, political science and economics provide valuable clues to understand the expanding role of the centre in education.

Kaul's (1965) study reported that the local bodies attended to the educational needs of the masses and developed leadership qualities in young generation. Vartak's study in 1971 also showed that this type of administration set up is more beneficial to the cause of rural education.

Inamdar's (1971) study showed that though the Zila Parishads have tackled the problem of expansion, the quality of education has in reality suffered because of the widespread interference of the non-officials in matters of teacher's transfers resulting in the dislocation of smooth and stable running of the schools. The study also pointed out that the Zila parishads have been slack with regard to the inspectional and supervisory work. Iqbal Narain et al (1974) also reported about the political involvement in teacher victimisation under Panchayati raj system. Patel (1975) concluded from his study that although Panchayati raj has made an impact on the expansion of primary education, yet much more is needed for improving school quality, teacher morale and school-community integration.

As a part of the Third Educational Survey, the National Staff College for Educational Planners and Administration (later renamed as the National Institute of Educational Planning and Administration) conducted an All India Survey of Educational Administration in various states and Union Territories of India (NIEPA, 1974 and 1979). The main objective of the survey was to describe the existing set up and functioning of the governmental machinery for educational administration at all levels - national, state, district and block. It covered all stages of education (both formal and non-formal) from pre-primary to post-graduate and research levels.

education codes, and manuals, and administration of questionnaires to the administrative functionaries supplemented with interview, and observation of functioning of the existing administrative arrangements for elementary education in relation to the programmes of Universalisation in nine educationally backward states, namely Andhra Pradesh, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Orissa, Rajasthan, Uttar Pradesh and West Bengal. Solutions to eradicate the administrative hurdles and to promote congenial administrative practices for universalisation of elementary education in these areas were also suggested.

At the secondary stage, problems of students and teachers' adjustment have been studied by many researchers. Bhagia (1967) studied the adjustment problems of boys and girls in government and privately managed urban as well as rural schools. Administrative problems experienced by them were also studied by him. Khanolkar (1960) studied the problems of secondary schools in India with special reference to multipurpose schools and reported that their courses and content were greatly defective.

Perceptions of students about their rights and needs and those of collegemanagement, administrators and teachers were studied by Shan (1975). The study has demonstrated that the university administrators have failed in their administrative and financial approach to student personnel services and that there is expanding gap between the perception of students, teachers and administrators. Studies have also been made on the problem of wastage including failures among the college students. (e.g., Kamat & Deshpalkh, 1963; and IANK, 1969).

#### 4. Leadership Behaviour and Organisational Climate

Studies in this field have been conducted in the last decade by Sharma, Patel, Pillai, Shelat, Panaya, Dargi, Gupta, Singh, and Ganadi. These researches are all in the field of secondary education. On the principals of colleges only two studies, one by Franklin (1975) and the other by Narendra Singh (1982), have come to the notice of the author. Pillai probed to find whether there are some organisational climates which lead to better teaching-learning process in schools than others. If so, what are the possible climate alternatives and which of these alternatives would be more valuable to administrators for improving the quality of schools. The study also attempted to find out whether high morale among the faculty members was in any way related to openness of climate and how both these variables influence the performance level of students. Headmasters, Leadership Behaviour



and personality as the predictors of 'intimacy' (Group behaviour characteristic) among the different components of school system were studied by Gupta. The variables found to be significant predictors of the 'intimacy' are reported as Tolerance of uncertainty, Consideration, Predictive - Accuracy (Leadership behaviour dimensions), and Less Intelligent vs. More Intelligent (personality factor).

Gandhi studied school climate in schools of Gujarat and its relationship with variables like belief systems of teachers and pupil control ideology of teachers. The study revealed that in Gujarat state, the highest percentage of schools (38%) belong to the closed climate type and comparatively lower percentage of schools (24%) goes to the open climate type. The intermediate climate type constitute 38% of the total schools. The degree to which subordinates comply with the directives - especially directives involving professional matter issued by the superordinates is a major issue faced by all first line supervisors. Gandhi conducted a comparative investigation of school climate and the professional zone of acceptance of teachers. It was found the teachers' preception of the organisational climate of school seems likely to be an influence on the professional zone of acceptance of teachers.

Franklin analysed the factors for building the organisational climate of colleges of education, the correlation matrix of the dimensions of climate and factors of teacher morale and studied the failures and successes of college leadership in achieving openness of climate and high staff morale for their institution. Another study on the principals of colleges by Narenra Singh shows that Principals, manifesting an pattern of behaviour have less administrative problems while principals manifesting LL pattern of behaviour have more problems in their respective colleges. The organisational climate of educational institutions is also found to have a close relationship with leadership behaviour of a principal. Among those college having 'open' climate, it was found that larger percentage of the principals manifested an pattern of leadership behaviour and the rest of the principals manifested either LL or Lh pattern of leadership behaviour.

## 5. Inspection and Supervision

Although inspection and supervision are much talked about subjects and certain aspects of inspection and supervision figured in some studies related to administration at different levels, a full-fledged study was conducted not before 1961 when survey-cum-problem-analysis

study of major dimensions of inspection of schools by the officials of the state education departments in different parts of India was conducted by Trivedi (1961) later Sharma (1969) threw considerable light on the bureaucratic procedures adopted by school inspecting officers, and their complex and fault finding attitudes.

Kawat (1970) and Shivarudrappa (1979) in their different studies, collected perceptions about the purpose of supervision—according to Kawat the principals, teachers and inspecting officers think that the main purpose of supervision and inspection should be to guide the teachers for their professional efficiency and to encourage them in taking up new experiments. Shivarudrappa found that its main purpose, as perceived by headmasters and teachers, was to appraise the school work and to promote the professional efficiency of the school teachers.

Weaknesses in supervision have been pointed out in studies conducted by the State Institute of Education (1965) Gujarat, Mahajan (1970) and Sharma (1975). In the Gujarat Study it was reported that 58% of the supervisors are ignorant of the new techniques of teaching and the current problems in Indian education. Mahajan reported that most of the principals fail to play effective supervisory role because of the limitations of time and energy, lack of proper knowledge of the concept of supervision and proper cooperation from the teachers. Sharma studied the prevalent supervisory techniques in science teaching and found that supervision in physics did not come upto the teachers expectations.

Few studies have focussed on variables related to the effectiveness of supervision. Patel (1974) and Pandya (1975) found that the effectiveness is significantly related to variables like leadership behaviour, organisational climate of the school, the level of staff morale and the innovativeness of school management and school principal.

## 6. Innovations and Change

A few studies in the areas of educational innovations and change dealing with the nature of diffusion of innovation, characteristics of adopter categories and role of change agents, etc. have been completed in the last 15 years. Researches are available mostly in the area of school innovativeness which have reported characteristics of school heads, characteristics of innovative schools and teachers, and

characteristics of successful innovations. The studies of Subbarao, Bhogle, Buch, Rai and Bhagia, conducted during the period mentioned above, deal with either characteristics of innovations or innovative schools or with personal, professional and psychological traits of principals and teachers. These investigations have thrown considerable light on the factors promoting and resisting change in the Indian schools.

Subbarao's (1967) study constitutes the first attempt to find out the factors that contribute to the promotion of innovations. More innovative schools were found to have better facilities, more audio-visual aids, special rooms, and books and magazines for students and teachers. Lack of these facilities is one of the inhibiting factors for innovativeness. Managements of innovative institutions in general, are more progressive and enlightened in their policies. Shalini Bhogle attempted to study the mechanics of educational change in India by working on psychological and organisational correlates of acceptance of innovations by schools. She studied the influence of some social, psychological and organisational factors on the readiness (of both principals and teachers) to accept change in high schools.

Piloo Buch (1972) studied in early seventies conditions promoting adaptability of innovativeness in Indian schools. Her inquiry started with forty-nine factors suspected to influence school adaptability. Most of these factors concerned mainly the school principal. A few factors related to climatic dimension in the school were also taken up. During the same period, Kamla Rai (1972) attempted to identify factors which are related to diffusion process within the school system. Influence of thirty variables on the four dimensions of the diffusion process within the school was studied.

Susma Bhagia (1973) studied the characteristics of innovations related to their diffusion. The characteristics were perceived by school-principals and the diffusion rate of innovations selected by her was found with the help of a formula. As many as eleven characteristics were reported by her which were found to be related to the diffusion of innovations.

## 7. Future Priorities

The brief survey of research in educational administration indicates that apart from some important gaps in the areas mentioned above, some areas have been almost entirely neglected. Some of the neglected areas are: Role Performance of educational administrators at

various levels, Profiles of Educational Administrators, University level administration, Non-formal and Adult Education, Private Enterprise, Management of co-curricular studies, Management of examinations, Student & Teacher Associations, Management of Time, Management of Change and Training Activities and material-development.

(i) Role-performance at various levels

The role of Education Ministers, Legislators and Education Secretaries in determining the trends of educational planning and management and the roles of Directors of Education and other functionaries at the state and district levels in executing and implementing the policies need to be investigated. Studies of the working of Education Departments in the Secretariat of State Governments and the Directorates of Education, along with their ancillary offices is crucial from the point of view of policy formulation, decision-making, and implementation of programmes. Such studies should help in identifying crucial bottlenecks in carrying out the programmes and policies in education at various levels and give insight into removing the bottlenecks.

Studies related to role-performance of District Education Officers and institutional heads are also very important. Such organisational heads are expected to take care of various resources of an organisation and make best use of them, supervise and guide the staff and take care of staff development; take care of learning materials and learning situations including the library and the laboratory; develop a system of pastoral care and consultation channels; develop control mechanisms, develop linkages with the community; and also act as innovators and keep in touch with the new ideas and practices in the field.

They are, however, not always able to perform the various roles, stated above, in the best possible manner. The extent to which they succeed in their role performance varies from individual to individual. Various factors and problems related to teachers, students, parents, management committees, curriculum, finance etc. may affect their role performance. There may be some personal handicaps related to their personality traits, their leadership style, their training etc. Studies to investigate the factors related to the role of organisational heads and other functionaries are, therefore, of great significance.

## (ii) Profiles of Educational Administrators

Much interest is shown these days in the personal and professional background of those who administer education. The lack of orderly recruitment, selection and preparation of administrators are frequently cited as the reasons behind administrative problems and lack of administrative responsiveness to change. How do educational administrators in general differ in their administrative behaviour, in their personal and professional characteristics from the administrators in other areas? Studies of the personnel who plan administer and supervise education are important to indicate bias, if any, underlying the educational system. An international research project titled, "The Secondary School Head in Comparative Perspective" has been undertaken by the College of Education, University of Iowa in the United States to study the characteristics of secondary school heads in 14 selected nations, including India. Such studies for Indian heads at various levels would be quite revealing.

## (iii) University Level Administration

The whole domain of university level administration has remained untouched by the researches with a few exceptions of studies related to students-administration conflicts. There is a need to study the functioning of the University Grants Commission and the impact of its various programmes and schemes, administration at university level - functioning of various statutory bodies of a university, vice-chancellor and other authorities of a university.

The National Commission on Teacher-II is now carrying out the studies on various aspects related to university teachers viz. economic and social status of teachers, the bases and procedure of recruitment of teachers, retention and mobility in institutions of higher education, profiles of career development in higher education, world-load and nature of work of teachers, participation of teachers in decision making, grievances of teachers and their redressal, and value orientation of teachers. The findings of such studies would be of great interest to all the educational administrators concerned with higher education.

Adequate attention has not been paid to the teachers and students' participation in administration. A Study by Srivastava (1979) has come to the notice of the author. Whether or not the relationship between participation practices and teachers'

satisfaction in educational institutions is similar to that in industrial situations was the subject of his study. The study did not show any significant difference between the mean satisfaction scores of either teachers or students in institutions with high and low teacher and student participation scores respectively. More studies encompassing various aspects of participation are needed.

#### (iv) Non-formal and Adult Education

The sector of non-formal and adult education has acquired greater importance these days. There has been considerable expansion in this area. It is high time to study various administrative aspects of various schemes of non-formal and adult education. Of late some studies have been conducted on the administrative aspects of school broadcasts through radio and television. Studies are needed to investigate into the administrative and management aspects of different agencies providing non-formal and adult education through various ways.

#### (v) Private Enterprise

The role of private enterprise in education has been significant and contributory to the growth of Indian education. Yet it has remained largely unexplored. The only study that has been listed by Such (1975), was conducted by Adhyapak (1976) on the role of the private agencies in the development of education in Gujarat which pointed out the failures and shortcomings of private agencies, such as high-handedness of private managements, commercialisation of education, communal spirit, inefficiency of teaching personnel, unwholesome influences in recruitment of staff, etc. More researchers are needed to study the administrative strengths and weaknesses of schools managed by public enterprise in India.

#### (vi) Management of co-curricular studies

Co-curricular activities provide students with a rich and stimulating environment which may evoke their manifold potentialities and interests. The organisation, planning and administration of co-curricular activities at different stages of education needs probing. An example in this category is a study of the working of UNESCO clubs in Indian schools and universities. The study was conducted by Bhagla & Rao in NILFA which covered 39 out of 133 Unesco Clubs, enrolled with the Indian National Commission for Cooperation with Unesco, with regard to their situational aspects, organisational pattern, finance,

activities, the extent of achievement of their objectives, their problems and difficulties, possible solutions, and their views about a coordinating body.

It is said that the academically loaded curriculum does not leave much place for co-curricular activities. The dominance of the examination, the paucity of funds, lack of interest by authorities concerned because of the prior claims of more pressing demands on funds available to them, are some of the reasons given for inadequate attention towards these activities. These hypothesis may be tested and the manner of their conduct vis-a-vis the fulfilment of the objectives need investigation.

#### (vii) Management of Examinations

No one seems to be happy with examinations these days. Recently there have been more complaints about their management, about leakage of papers, about evaluation and re-evaluation of answer books etc. The organisation of examination at certain crucial stages involves various steps. How are these functions at various stages performed and how can their efficiency and effectiveness be improved? These are very important questions in educational administration which need substantial attention of researchers.

#### (viii) Student and Teacher Associations

Student associations and teacher associations play a significant role in educational sphere. While student-associations have completely been left out, few studies are available on teacher associations. Swamy (1977) studied the role and effectiveness of teachers' associations and found that the associations were functioning more to fight for the teachers' economic benefits than to mould the policies of the government with regard to education. They have failed to create public opinion on the educational issues and they have no lobbies either in the legislatures or the parliament. Studies on student associations are particularly very much needed.

#### (ix) Management of Time

No serious studies have been undertaken to investigate the ways and means of managing time in educational organisations. Time tabling is a crucial task in educational institutions and effective time-scheduling by heads of educational organisations is important from all

angles of educational administration. This area needs particular attention by researchers in view of the general complaint of the administrators about paucity of time.

#### (x) Management of Change

Studies conducted in the field of innovations and change have thrown little light on the management aspects of educational change. Studies of depth in the form of case studies of innovations are needed for this purpose, in which various aspects like full description of the innovation, persons involved including teachers and pupils, their outcomes and difficulties may be covered for future guidance of administrators.

Apart from the studies of innovations as such, situational studies are also needed to find out the degree to which the state and local situations are favourable for different innovations to analyse the ways in which the innovations will be useful in the system in terms of social, psychological and material benefits, to assess the kinds of preparatory steps required to build understanding and readiness for acceptance of the innovations and to determine the additional information, knowledge and skills required by those who will implement the innovation and those who will actually use it in or outside the class-room. It would also be worthwhile to find out the factors which tend to improve chances of success or inhibit success of various innovations. It is again not sufficient to comprehend the mechanism of innovation and the conditions which stimulate or discourage it. Subsequent events are equally important for the planners, educators and the administrators for modification in the strategies and execution of the plans of change. Correspondence between educational change and administrative change (administrative structures, processes and financial provisions and management), the impact of departmental rules and regulations and financial procedures of educational change, the process of decentralised and centralised planning of education are crucial areas in management of change which need to be attended in future.

#### (xi) Training Activities and Material-Development

Studies related to training activities and material-development for the administrators of schools, colleges and universities, and those working at the block, district and state levels are greatly needed with the expansion of training opportunities in the country. All these administrators may have certain roles in common in so far as



the basic theoretical and conceptual foundations are concerned, yet the analysis of the task portfolios of each of these positions might indicate different needs and emphasis in the materials.

Upasani (1980) has evolved a Management Development Programme (MDP) for school Administrators. His work included task analysis, identification of competencies required and formulating the contents of MDP, its pattern and instructional methodologies. Curriculum guide and illustrative training materials were also developed. The school administrator of a secondary school was the focus of the study.

It would be worthwhile to undertake such researches for developing materials for administrative positions in the field of education like Education Officers, Deputy Directors, Joint Directors etc. at district, regional and state levels.

Studies evaluating training programmes in educational administration are also very much needed to respond to the crucial question, "Has the training actually brought forth a change in on-the-job behaviour of trainees?" The ultimate objective of training is to improve on-the-job behaviour after the programme.

In some of the training programmes in school management for principals of secondary schools, held in NIBRA, the participants were asked to prepare their individual action plans for applying new knowledge & skills. The action plans were presented before the whole group for their suggestions and they were requested to keep us informed about the success or the failure of the implementation of their action plans. The progress of their action plans in their schools was followed through correspondence. It was found that most of the trainees were not able to implement their action plans due to a number of factors. Thus, the impact of the programme also depends on a variety of situational factors. It would be worthwhile to find out these factors by designing some suitable studies.

## 6. Conclusion

With regard to the past performance and future possibilities of research in educational administration, I have restricted my observations to its content. Much can be said about the approaches and the methodology adopted for the research studies including sample, tools, techniques and collection as well as treatment of data. This requires another and perhaps a more rigorous exercise.

Considering the quantum, the content and the continuity of research in educational administration in India, one can easily see that there is a good scope for development of researches in educational administration from the ideas which have been made available by earlier studies. There is hardly any development of theoretical concepts in educational administration out of researches conducted in India. Nor there has been any serious attempts to solve problems of educational administration by way of applied research in the field. Research is primarily meant for social good; not merely for individual promotion. Hence, the need for building further on the ideas, which have been made available by way of research, cannot be over emphasised.

## REFERENCES

The references given in the two volumes of Survey of Research in Education (Buch, 1974 and 1979) are omitted from the present list. Interested readers may refer to Buch's Volumes.

Adavai, S.B. (1966) The Third Indian Year Book of Education (New Delhi, National Council of Education Research and Training)

Bhagia, N.M.(1969) "Study of the Problem of School-Adjustment and Development of School Adjustment Inventory", Handa 16/1 (July) 13-20.

Bhagia, Sushma, (1978) "Perception of Characteristics of Innovations as Related to Their Diffusion in Schools of Gujarat", Indian Educational Review, 13/2 (April) 69-72.

Bhagia, N.M., Sushma Bhagia and J.N. Kalra (1975) Intensive Study of Innovations & the Extent of their Utilisation in Schools and Training Colleges of Haryana (Kurukshetra, Kurukshetra University).

Bhagia, N.M. and Rao, M.K. (1980) "A Study of the Working of Unesco Clubs in India", EPA Bulletin, 3/1 (April) 74-80.

Buch, N.B. (1974) A Survey of Research in Education (Baroda, Centre of Advanced Study in Education).

Buch, N.B. (1979) Second Survey of Research in Education (Baroda, Society for Educational Research and Development)

Gupta, G.P. (1979) "Headmaster's Leadership Behaviour and Personality as the Predictors of Intimacy among the different components of school system", EPA Bulletin, 2/1 (April) 65-65.

Ministry of Education (1970) The Spread of Girls' Education in Mehsana District : A Sample Survey (New Delhi, Government of India)

NCEET (1980) A Study on the Functioning of School Broadcast Unit of All India Radio and a case analysis of utilisation of school broadcasts in Jaipur (New Delhi, Centre of Education Technology)

NCEET (1980) A Case study of School broadcasts in Delhi, (New Delhi, Centre of Educational Technology)

NIEPA : National Institute of Educational Planning and Administration  
(1974-75) Educational Administration : Survey Reports of All States  
and Union Territories (New Delhi, NIEPA)

NIEPA, (1975) Administration of Elementary Education in Arunachal Pradesh, Assam, Bihar, Jammu & Kashmir, Madhya Pradesh, Rajasthan, Orissa, Uttar Pradesh and West Bengal, (New Delhi, NIEPA)

Pillai, J.K. (1978) Organisational Climate, Teacher Morale and Social Quality EPA Bulletin, 3/3 (October)

Singh, R.N. (1978) A Study of Leadership Behaviour of heads of secondary schools in Haryana and its Correlates Ph.D. Thesis (Kurukshetra, Kurukshetra University)

Privastava, K.C. (1975) "Participation Practices and Faculty and Study Satisfaction, EPA bulletin, 2/2 (July)

Upasani, V.N. (1980) "Management Development Programme for School Administrators", EPA bulletin, 3/3 (October)

PAPERS IN THE SERIES

No.	Title	Authors
1.	Education, Technology and Development : A Perspective	N.V. Varghese
2.	Resources for Education in India	Jandhyala B.G. Tilak and N.V. Varghese
3.	Research in Educational Administration : Retrospect and Prospect	N.M. Bhagia
4.	Inequities in the Levels of Literacy in India	Moonis Raza and Y.P. Aggarwal