

# Educational Research in India: An Overview

A.K. SHARMA

The studies documented in this Fifth Survey of Educational Research in India present the state-of-the-art in the field of education at school stage during 1988-92. It is encouraging that over the years the quantum of studies related to school education have maintained an upward trend. This Survey reports on 1828 studies compared to 1651 studies in the Fourth Survey, 1481 in the Third Survey, 806 in the Second Survey, and 729 studies in the First Survey of Educational Research in India. As generally observed by the experts who have authored the trend reports, the methodologies applied in the reported studies leave much to be desired. The authors have also expressed concern about the general orientation of scholars of reported studies in the systematic processes involved in quality research and their judicious applications in understanding and interpreting teaching-learning phenomenon. However, in the reported studies the researchers have applied normative as well as interpretive approaches to issues and problems of education in the Indian context. Practically all sectors of education including pre-school, elementary, secondary, higher secondary, and teacher education have been examined. Historical, philosophical, psychological and other social and basic sciences perspectives on teaching-learning issues and problems have been reflected in the reported studies.

This documentation takes into account the

doctoral studies in education and other allied disciplines with implications for education. It also includes studies carried out as in-house or sponsored projects by various institutions engaged in research and developmental activities. To have a comprehensive coverage of the studies carried out in the universities and other institutions, special arrangements were made to scan through available studies. The identified studies were abstracted and classified into 38 areas. As per the recommendations of the Editorial Advisory Board, noted experts were invited to write trend reports in each of these areas reflecting on the national and the international scene in the respective areas and the research gaps for further studies. General guidelines were provided to the authors of the trend reports. The trend reports presented in this volume were duly edited and the edited version of the trend reports were again sent to the authors for concurrence and any last minute changes.

In this chapter, an overview of the emerging trends as identified by the authors of various trend reports is presented. Seshadri has reviewed the studies related to **Philosophy of Education**. He has observed that there has been no visible improvement in the overall situation in the quality of the studies. He has reiterated the need to address a wide variety of philosophical issues related to education in the



present Indian context and to study them philosophically—offering arguments, clarifying concepts, putting forward metaphysical views with intellectual support and offering grounds for normative assertions. He has indicated that philosophy of education should not restrict its concerns to the study of events and personalities of the past only. If the objects of philosophical inquiry are limited to ancient lore alone, philosophy to that extent distances itself from living reality, weakens its link with emerging concerns and becomes just an academic exercise. ... philosophy of education will have functional value only when its concern emerges from the events and problems that are experienced here and now.

Further clarifying the scope of studies on philosophy of education, Seshadri has stated that almost every aspect of education—its meaning, aims, content and process—holds out exciting possibilities for logical and conceptual examination. There are also philosophical insights to be gained about the relationship of education itself with other spheres of human activity, social, political, economic and religious. Educational discourse is highly complex in nature and cuts across the empirical, *a priori* and normative forms of inquiry. Clarification of concepts; analysis and appraisal of arguments, statements and theories; synthesis and integration of such understanding with substantive issues of curriculum, systems of schooling, the process of learning and teaching, school management and educational institutions; and issuing normative guidelines on aims, curriculum methods, institutions and teachers — can all be legitimate functions of philosophical enquiry in education.

Sachchidananda has scrutinised the studies on **Sociology of Education**. He has observed that in most of the studies hypotheses have been put forward and tested for their validity. The importance of issues and research questions have been eclipsed by the hypotheses. In some cases the fundamentals are missed while

trivial aspects gain respectability. ...It seems that there is overdependence on the survey method.

Emphasising the need for in-depth studies with interdisciplinary perspective to explain social realities, Sachchidananda has identified issues and problems that could be meaningfully addressed for better understanding of the Indian sociological contexts.

Ghosh has made a pointed reference to new approaches to the study of **History of Education** and the emerging areas of history including local history, comparative history, political, social history, and intellectual and cultural history. He has pointed out that the study of history of education is no longer regarded as a matter of 'Acts and Facts'. The conception of education has broadened considerably in recent years and education is no longer just a matter of formal schooling; it also includes the many societal influences which go to shape a person's character and intellect. Accordingly, history of education is concerned not merely with institutions but with the social forces which have affected the quality of life, and with the ideas which have been put forward by theorists and practitioners of education in the past. In this context education is an adjunct to the historical process besides being one of the chief factors conditioning human beings' outlook and aspirations. Ghosh has, therefore, viewed the study of history of education as a part of wider study of the history of society—social history, broadly interpreted with politics, economics and religion.

Reflecting on new areas for exploration Ghosh has observed that the history of education in India is a virgin field. Very little is known about education in ancient and medieval India and what is now known about in modern India is limited mainly to education as it developed in the British period. He has recommended that an investigation into regional disparities in education in India, which are now engaging the attention of educational planners,



should start with an analysis of education as it had existed in the Indian states which are a part of India since 1947. He has flagged the point that studies related to history of education should relate to changes in society. Any interpretation of educational change should take into account the fact that different social classes and groups, including minorities, develop and articulate policies and indeed a general outlook reflecting their own needs and aspirations. Societies all over the world are riven by contradictions and divisions between opposing forces. Such divisions, and the conflicts to which they give rise, are necessarily reflected in the world of education—sometimes directly. The result is that education becomes and is best seen as, the site of struggle between what are often opposing, or at least, antagonistic, social forces. Such conflicts can become acute, as the historical record shows very clearly, and characterise the very beginning of the history of education in modern India.

Panchamukhi has presented a thematic review of studies on social science perspective, particularly **Economics of Education**, and observed that most of the studies are largely empirical in nature. The conceptual and vigorous, theoretical studies are conspicuous by their absence.

The themes considered in the review include (i) interlinkages between education and socio-economic variables, (ii) problems of inequality in education: economic dimensions, (iii) issues in educational planning, and (iv) problem in educational finance, conceptual issues relating to the identified themes have been raised, critical thematic review of studies have been discussed and researchable areas have been indicated for future researchers.

It is to be noted that a number of issues relating to the economic aspects of education have merged in the course of the research studies examined in the review. These issues have gone beyond the initial themes of economics of education which are related to the problems of costs, financing and returns to

education. The new issues which have attracted researchers in social sciences relate to diverse themes as wastage and stagnation, the economics of study by foreign students in India, brain drain problems of educated unemployment the economic dimension of different methodologies of transmitting knowledge to students, distributional issues concerning the questions of access to and utilisation of educational opportunities, education and economic reform, etc. Inter-sectoral perspectives on education and other sectors of the economy have further enriched the social science perspectives on education.

Nayar has provided a framework for realistic research and studies in **Psychology of Education** in the Indian context. He has highlighted the general trend of research in cognitive psychology of learning, personality development, adjustment and social-cultural aspects the world over as well as in India. He has also analysed the trends in Indian studies in specific areas including development; learning; personality correlates of educational outcomes; personality traits (correlates/determinants); personality patterns and traits of students; attitudes, values and other student characteristics; adjustment, problems and delinquency; teacher characteristics, perceptions, etc. Reflecting on thrust areas for future research in the field, Nayar has emphasised that learning should continue to be the core concern and closely related to learning and development, individual differences and adjustment. Learning is to be studied as a process, understood—and undertaken—in relation to the products (intended and/or actual) as well as the different kinds of internal and external variables that affect both. Any one or two of these taken in isolation would give only an incomplete picture. He has recommended that "while studies correlating the variables might help in identifying variables of relevance as part of a preliminary effort, causal-comparative studies with selected variables and employing multi-variate analysis would indicate the interrelationships better. But to establish them



firmly and analyse the effects of varying combinations, experimental studies are needed'. He has also underscored the use for case studies, ethnographic studies and other situational studies attempting comprehensive and deep probe and yielding clear pictures of the effects of a multiplicity of unique socio-cultural and educational factors in active interplay.

Broota and Misra have reviewed studies in the field of **Mental Health** in the educational context. They have observed that "although mental health constitutes an important facet of the educational process, it has not received sufficient attention by the researchers". After presenting an analysis of studies in terms of three main components of the educational system (that is, students, teachers and the educational process) they have examined the status of studies in terms of (i) problems of mental health during childhood, (ii) adolescents problems (iii) problems of the aged, (iv) mental health of teachers, (v) issues related to drug addiction, anxiety reduction, and health education and planning for health promotion. They have proposed an agenda for future research in the field of mental health based on a critical appraisal of available studies.

Mishra has considered inclusion of studies on **Cognitive Processes** in a survey of educational research to be a landmark. This reflects a change in the attitude of educationists in the context of what has been taking place on the contemporary educational scene on the one hand, and in the realm of other related disciplines on the other.

Two major traditions of research on cognitive processes have been identified. One is the tradition of hard core "experimental research" in which the emphasis is placed on describing how an individual receives information, transforms it into familiar meaningful codes, recollects it when needed, and makes its effective use in solving a wide variety of problems. An information-processing approach to behaviour is adopted. A second tradition is represented

by "developmental research" in which the concern is to examine the growth and development of cognitive processes from biological (maturational) and socio-cultural perspectives. In this approach the evolution of various cognitive processes is systematically traced from early infancy to the whole developmental span of individuals. Qualitative as well quantitative changes occurring in cognitive structures and functions at various age-levels are analysed and described in a developmental sequence.

Mishra has presented an analysis of major issues in research on cognitive processes and reflected on the utility of such studies in the field of education.

Panda has reviewed studies on **Social Processes** with implications for education and provided a research perspective for future work in this area. He has organised the analysis of studies under (i) socio-cultural influence, personality and the adjustment process, (ii) cooperative behaviour and correlates of social integration, (iii) family environment, behaviour development, and social competence, (iv) child-rearing practices, and social processes, (v) role-conflict, role-perception, and communication process, and (vi) extension activities and social interactional change. He has highlighted that educational research on **Social Processes** needs to concentrate on: development of cooperation versus competition, the accommodation and assimilation process, conflict resolution and socialisation, socio-cultural influences, ecological variations influencing interactional processes and adjustment in school and family, engineering extension activities to bring about desirable individual and social change, manipulative social behaviour, person perception and, more so, development of healthy attitudes and resolution of social tension and ethnic prejudices, and contribution to social integration.

Parameswaran has made a pointed reference to the status of Indian research in the field of **Motivation**, especially in relation to classroom



learning. He has identified crucial areas like motivational factors in learning difficulties, the use of "learning groups" as motivational factors, motivational problems of the immigrant rural students into the urban areas which need to be studied. He has also highlighted the use of case study approach to understand motivational aspects of high achievers from deprived groups and use for well organised studies to work out action oriented alternative intervention studies to improve classroom learning situations.

Passi has observed that in spite of definitional divergences and other difficulties to conduct research in **Creativity** there has been a consistent growth of research in the area. Indian researchers have shown interest in this complex and multi-faceted phenomenon but significant educational problems have not yet been undertaken. Among the identified factors which are deterrent for studies in creativity in the field of education include increasing rigidity of teaching-learning situations, intense standardisation of educational substance, increasing centralisation of the decision-making process, traditional bureaucratic managements, and declining financial resources available for school systems.

The analysis of studies in creativity is presented under headings like review of research trends, research methods, researches in creativity, development of creativity, training of personnel, systems approach and future thrust areas.

Vaidya has taken **Science Education** as an integrated concept linking science with education using psychology. He has reviewed studies in the area under (i) Environmental Studies, (ii) Science Curriculum, Syllabus and Textbooks, (iii) Learning and Models of Teaching in Science, (iv) Teaching Strategies, (v) Outcomes of Science Education, (vi) Correlates of Achievement in Science, (vii) Educational Technology, and (viii) Other Related Studies. Reflecting on the future agenda for researchers he has underscored the need for undertaking

research in science education at a faster pace as only 150 studies were documented in this area upto the Fourth Survey and 61 were identified in this Fifth Survey of Educational Research.

Kapur has observed that improvement in research on **Mathematics Education** in recent years has underscored the need to do organised and sustained research at the national and state level, and not to be contended with individual and isolated studies in the area. He has reviewed the studies related to (i) high failure rates in mathematics, (ii) learning and teaching of mathematics, (iii) Special problems of learning and teaching of geometry, and (iv) evaluation of mathematics curriculum. He has also highlighted some of the problems in mathematics education that need to be probed into.

The studies on **Physical and Health Education**, reviewed by Venkatesha Murthy reflect the state-of-the-art predominantly at the doctoral level. The review covers studies in health education, physical education, sports, athletics and nutrition.

Arti Sen has pointed out a noticeable and renewed emphasis on non-cognitive learning in her analysis of trends in studies on **Moral, Art and Aesthetic Education**. Her review includes studies on moral education reflecting social learning, psychoanalytic and cognitive developmental theoretical perspectives.

The review has also highlighted the need to work out a research based realistic and effective scheme of moral, art and aesthetic education to avoiding school curriculum from getting unnecessarily overloaded. In each of the three areas research gaps have been identified.

Onkar Singh Dewal has documented the developmental phase of **Educational Technology** in India and analysed the research studies focussing on (i) Video and ETV Programmes, (ii) Radio and Audio Programmes, (iii) Micro Teaching Strategies, (iv) Computer Assisted Instruction, Personalised System of



Instruction and Mastery Learning, (v) Programmed Learning, Teaching Aids and Film Strips, and (vi) Educational News Reporting. He has especially emphasised the need to reach the research results in a comprehensive form to the educational practitioners and policy planners. He has also highlighted the need to probe into the uncharted field of illuminative and indepth phenomenological research studies in educational technology.

Singh and associate have reviewed studies on **Teaching Strategies**. They have observed that majority of studies in this area are the Product-Process type, that is simply measuring the outcome of an instructional process. They have emphasised the need for comprehensive and closer-to-reality research designs to explore the Presage-Process as well as Presage-Process-Product variables, that is the variables related to learners as well as teachers.

Joshi, has adopted the systems model of classifying studies on **Teacher Education** to maintain continuity with previous reviews on the subject. The studies have been analysed under context-presage-process-output components. Reflecting on future needs and directions, he has pointed out the importance of establishing linkages between teacher education and its consequences in terms of cognitive, affective and psychomotor learning to acquire insight into the ways the teachers can be trained to adjust their teaching according to differing background of different kinds of pupils.

Trends in **Vocational and Technical Education** have been analysed by Seri Gupta. He has pointed out intensive change and reorientation in the field and emergence of a mutliplicity of national models, forms and structures to cope with the rapid technological advances and the changing needs of the labour market. He has identified research issues to be probed which are related to (i) policy, management and planning, (ii) curriculum and instructional material, (iii) school-industry linkage, (iv) vertical mobility and (v) teacher

training.

Jangira has pointed out qualitative changes that are taking place in the area **Special Education**. He has referred to the emerging concept of 'inclusive schooling' which according to him is not an alternative but an inevitability. The trend report takes into account the context of meeting special educational needs focusing on the educational system as a whole and not within the institutional dichotomy of general and special institutions.

Lokesh Kaul has traced the quantitative growth and trend of research in the **Open and Distance Education**. He has observed that the issues examined so far are mostly related to the needs of distance learners and their characteristics, drop-out phenomena, preparation of instructional material and submission of assignments, status of study centres, organisation of personal contact programmes, and financing of distance education. It is visualised that with the setting up of the Distance Education Council effective steps will be taken to promote quality research in distance and open education at the fundamental, the experimental and the application levels to constantly enrich training programmes, management processes, distance education systems, and to meet the challenges of the changing times and needs, and the new communication and information technology.

Ambasht has spelt out the distinction between **Adult, Continuing and Non-Formal Education** and reviewed the studies in the respective areas. He has observed that in addition to applied and impact studies, fundamental research is also needed.

Neerja Shukla has reviewed the studies on **Education of the Scheduled Castes, Scheduled Tribes and Minorities** under various heads which include studies in (i) Scheduled Castes, (ii) Scheduled Tribes, (iii) deprived and disadvantaged groups, (iv) Scheduled Castes and Scheduled Tribes, (v) Comparative researches on Scheduled Castes and other groups, (vi) Comparative researches on Scheduled tribes



and other caste groups, (vii) Comparative researches on education of Scheduled Castes, Scheduled tribes and other castes, (viii) comparative researches on education of backward classes and other caste group, and (ix) education of regional minorities. The review reveals that in all the three areas, that is, education of the Scheduled Castes, Scheduled Tribes and minorities the studies have very limited value for educational planning for these groups. In-depth studies are required. Specific problem areas are listed, for researchers' attention.

Studies on **Education of Girls and Women** have been analysed by Usha Nayar. The review has spelt out a suggestive framework for future research on women's education and women's issues based on the studies in the area reported so far. The review also highlights the evolution of research and enquiry into educational and social situation of women in the country till date.

**Demographic Studies in Education and Population Education** have occupied a centre stage position in view of the increasing recognition being accorded to the linkage of demographic issues to the citizen's right to life with dignity on the one hand, and the role which education can play in empowering the citizen to make rational choices in matters of family size, on the other. Bhatia has examined the studies in these areas and has observed that, both at the macro and micro levels, education is being increasingly recognized as a significant variable. Knowledge-generation processes, as evidenced in published research indicate that the Information, Education and Communication (IEC) strategy is beginning to receive substantive research attention at the policy formulation as well as programme management levels.

Studies in the emerging area of **Ecological Environmental Studies in Education** have been analysed by Ambasht. He has highlighted the need for studies on environmental education at all levels and region.

Kerawala has presented the status of **Comparative Education**. She has pointed out that research in comparative education in the sense of cross-national or cross-cultural studies is not very popular, and understandably so due to the inherent practical difficulties and academic constraints in undertaking such research.

The trend report on **Educational Assessment and Evaluation** by B.N. Mukherjee has identified the research gaps in the area including research in examination. He has observed that the level of sophistication necessary for making educational testing develop into an emerging science of assessment in India will need properly validated and standardised educational tests, training in interpreting the test results and updating educational researchers' understanding of systems and approaches, including the functional use of the computer, to plan and implement technically sound research projects in education.

Azad has noted in his analysis of studies on **Educational Planning and Policy Research** that although educational planning has been in vogue for more than four decades, not much attention has been given to strengthening of research base in the country. The area of policy research and perspective planning is practically unexplored.

Management has become a well established profession. However, the education sector has not yet fully internalised the developments in the field of management and continues to look at educational planning, administration, and organisation as separate, and treats management as separate. Rao and Sridhar have presented an analysis of studies on **Organisation, Administration and Management of Education** as a response to management issues including (i) Community Diagnosis and Client System Analysis, (ii) Strategy Formulation and Implementation, (iii)

Educational Information Systems and Decision-Making (iv) Organizational Restructuring, (v) Financial Management and Resource Mobilisation, (vi) HRD, OD and Institution Building.

Achievement is the end-produce of educational endeavours. After exploring the concept of achievement in the cognitive, affective and psychomotor aspects of learners' behaviour, researchers have probed further and have attempted to understand the 'black box' of achievement, as observed by Balasubramanyan in his analysis of studies on **Correlates of**

**Achievement.** The studies on 'how' of achievement have brought to light the correlates of achievement and paved the way for control and manipulation of variables for quality management of achievement.

It emerges from the studies included in the survey that educational research in India has progressed substantially over the years. In spite of variations in professional approach to understand issues and problems in the field of education, and school education in particular, commendable studies have been conducted in practically all sectors of education.