

**FIFTH SURVEY
OF
EDUCATIONAL
RESEARCH
1988-92**

**TREND REPORTS
VOLUME I**



राष्ट्रीय शैक्षिक अनुसंधान और प्रशिक्षण परिषद्
NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

August 1997
Sravana 1919

PD 3T GR

© National Council of Educational Research and Training, 1997

ALL RIGHTS RESERVED

- No part of this publication may be reproduced, stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior permission of the publisher.
- This book is sold subject to the condition that it shall not, by way of trade, be lent, re-sold, hired out or otherwise disposed of without the publisher's consent, in any form of binding or cover other than that in which it is published.
- The correct price of this publication is the price printed on this page. Any revised price indicated by a rubber stamp or by a sticker or by any other means is incorrect and should be unacceptable.

— OFFICES OF THE PUBLICATION DIVISION, NCERT —

NCERT Campus Sri Aurobindo Marg NEW DELHI 110016	108, 100 Feet Road, Hosdakere Halli Extension, Banashankari III Stage BANGALORE 560085	Navjivan Trust Building P.O. Navjivan AHMEDABAD 380014	CWC Campus 32, B.T. Road, Sukchar 24 PARGANAS 743179
--	--	--	--

Rs 419.00 £ 41.90 \$ 125.7

Published at the Publication Division by the Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110 016, lasertypeset at Nath Graphics, 1/21, Sarvapriya Vihar, New Delhi 110 016 and printed at J.K. Offset Printers, 315, Jama Masjid, Delhi 110 006

Foreword

This review of studies, conducted in India during 1988-92, has adopted a format that is somewhat different from the earlier Surveys. In the previous four survey reports, the abstracts of studies in a given thematic area were given after the trend report. In view of a wider coverage of thematic areas in educational research with implications for school education in the present Survey, and to keep the publication handy to read from, the trend reports on studies in different areas and the abstracts of the studies have been brought out in two separate volumes. It is hoped that this arrangement will meet the requirements of research scholars.

All efforts were made to complete various tasks related to the Fifth Survey within the stipulated time and to release the publication earlier. Due to various professional hazards the publication has taken longer time than planned. The inconvenience caused to the scholars due to this delay is deeply regretted. To avoid such delays in future a time-efficient strategy has been adopted to keep scholars informed of the completed studies in the field of education. Every six months a publication entitled *Indian Educational Abstracts* is now brought out by the NCERT. The inaugural issue was brought out in July 1996. Future issues will be available from the Publication Division of the NCERT.

The tasks of documenting studies, analysing the trends in different areas of education and publishing the trend reports and studies' abstracts have indeed been challenging. Professional colleagues associated with this project completed their respective assignments with commendable sense of responsibility. Their invaluable contributions are gratefully acknowledged. The Editorial Board extended guidance in various policy matters. Contributions of members of the Editorial Board deserve a special mention. The dedication demonstrated by the Project Team throughout the project period was an important contributing factor in the successful completion of this work.

A. K. SHARMA
Director
National Council of Educational
Research and Training

Editorial Board

Chairman

Prof. A.K. Sharma
Director
National Council of Educational
Research and Training
New Delhi 110 016

Vice-Chairman

Prof. A.N. Maheshwari
Joint Director
National Council of Educational
Research and Training
New Delhi 110 016

Members

Dr. M.B. Buch
*Formerly with, M.S. University
of Baroda (Expired)*

Prof. P.S. Balasubramanian
*Formerly with, University of
Madras*
No.6, Sriram Nagar Colony
Tharamani Post
Chennai 600 113

Prof. Suma Chitnis
*Formerly with, SNDT Women's
University, Bombay*
C/1 Palacimo
Silver Oaks Estate
Warden Road
Bombay 400 026

Prof. J.N. Joshi
Prof. Emeritus
Department of Education
Panjab University
Chandigarh 160 014

Prof. Lokesh Koul
Dean & Head
Faculty of Education
Himachal Pradesh University
Summer Hills
Shimla 171 005

Prof. Binod Kumar
Indian Institute of Management
Joka Diamond Harbour Road
Calcutta 700 027

Prof. Ajit Mohanty
Centre for Advanced
Studies in Psychology
Utkal University
Vani Vihar
Bhubaneswar 701 004

Prof. B.N. Mukherjee
*Formerly with, Indian Statistical
Institute (Expired)*

Prof. A. Sukumaran Nair
*Formerly with, Mahatma
Gandhi University*
Hari Mandiram
Vanchiyoor
Thiruvananthapuram

Prof. P.R. Panchamukhi
Director
Centre for Multi-Disciplinary
Research
D.B. Rodda Road
Jubilee Circle
Dharwad 580 001

Prof. K.C. Panda
Formerly with, NCERT
38, Madhusudan Nagar
Unit - IV
Bhubaneswar 751 001

Prof. K.P. Pandey
Head & Dean
Faculty of Education
Mahatma Gandhi Kashi
Vidyapith
Varanasi

Prof. E.G. Parameswaran
Department of Business
Management
Osmania University
P-3 Osmania University
Campus
Hyderabad 500 007

Prof. T.V. Rao
Director
Academy of Human Resources
Development
12, Cosmoville,
Satyagrah Marg
Ahmedabad 380 054

Prof. C. Seshadri
Formerly with, NCERT
16, Gangotri Layout
1 Cross II Stage
Mysore 570 009

Prof. Durganand Sinha
*Formerly with, A.N.S. Institute
of Social Sciences, Patna*
8 Malaviya Road, George Town
Allahabad 211 002

Contributors

Prof. N.K. Ambasht
Head, Department of Education
in Non-Formal and Alternative Schooling
NCERT
New Delhi 110 016

Prof. R.S. Ambasht
Department of Botany
Banaras Hindu University
Varanasi 221 005

Prof. C.L. Anand
Visiting Professor
Department of Education
Panjab University
Chandigarh 160 014

Prof. J.L. Azad
Formerly with, Planning Commission
B-2/98, Safdarjung Enclave
New Delhi 110 029

Prof. P.S. Balasubramanian
Formerly with, University of Madras
No.6 Sriramnagar Colony
Tharamani Post
Chennai 600 113

Prof. S.C. Bhatia
Department of Adult and
Continuing Education
University of Delhi
Chhatra Marg
Delhi 110 007

Prof. Asha Bhatnagar
Department of Educational Psychology
and Foundations of Education
NCERT
New Delhi 110 016

Prof.K.D. Broota
Department of Psychology
University of Delhi
Arts Faculty Extension Building
Delhi 110 007

Prof. P.N. Dave
Formerly with, NCERT
76, Kshitij, Pritam Society I
Bharuch 392 002

Prof. Onkar Singh Dewal
Formerly with, NCERT
C-194, Sarvodaya Enclave
New Delhi 110 017

Prof. S.C. Ghosh
Chairman
School of Social Sciences
Jawaharlal Nehru University
New Delhi 110 067

Prof. M. Sen Gupta
Head, Department of Education
Regional Institute of Education
Bhopal 462 013

Dr. Nirupama Jaimini
Department of Education
Central Institute of Education
University of Delhi
33, Chatra Marg
Delhi 110 007

Prof. N.K. Jangira
Formerly with, NCERT
Consultant, The World Bank
70, Lodhi Estate
New Delhi 110 003

Prof. J.N. Joshi
 Prof. Eméritus
 Department of Education
 Panjab University
 Chandigarh 160 014

Prof. J.N. Kapoor
Formerly with, IIT, Kanpur
 C-766, New Friends Colony
 New Delhi 110 005

Prof. Lokesh Kaul
 Head and Dean, Faculty of Education
 Himachal Pradesh University
 Summer Hills
 Shimla 171 005

Prof. Gulistan J. Kerawalla
 Head, Department of Education
 University of Bombay
 J.P. Naik Bhavan, Vidyanagari
 Santacruz (East)
 Bombay 400 098

Prof. Kuldip Kumar,
 Head, Department of Educational
 Research & Policy Perspectives
 NCERT, New Delhi 110 016

Prof. Girishwar Mishra
 Department of Psychology
 University of Delhi
 Arts Faculty Extension Building
 Delhi 110 007

Dr. R.C. Mishra
 P.G. Department of Psychology
 Banaras Hindu University
 Varanasi 221 005

Prof. Biswa Nath Mukherjee
Formerly with, Indian Statistical Institute
 Calcutta
 (Expired)

Prof. Rajalakshmi Muralidharan
Formerly with, NCERT
 (Expired)

Dr. C.G. Venkatesha Murthy
 Department of Educational Research and
 Policy Perspectives
 NCERT
 New Delhi 110 016

Prof. Usha Nayar
 Head, Department of Women Studies
 NCERT
 New Delhi 110 016

Prof. P.R. Nayar
 Prof. Emeritus,
 Department of Education
 University of Mysore
 Mysore 570 006

Prof. P.R. Panchamukhi
 Director
 Centre for Multi-Disciplinary
 Development Research
 D.B. Rodda Road, Jubilee Circle
 Dharwad 580 001

Prof. K.C. Panda
Formerly with, NCERT,
 38, Madhusudan Nagar, Unit IV
 Bhubaneswar 751 007

Prof. E.G. Parameswaran
 Department of Business Management
 Osmania University
 P-3, Osmania University Campus
 Hyderabad 500 007

Prof. B.K. Passi
 Vice-Chairperson
 National Council for Teacher Education
 Bharat Scouts & Guides Building
 No. 16, Mahatma Gandhi Road
 Indraprastha Estate
 New Delhi 110 002

Prof. V.K. Raina
 Department of Teacher Education and
 Extension Services
 NCERT
 New Delhi 110 016

Prof. T.V. Rao
Director
Academy of Human Resource Development
12, Cosmoville Satyagrah Marg
Ahmedabad 380 054

Prof. Virinder K. Sabharwal
Central Institute of Education
Department of Education
University of Delhi
33, Chhatra Marg, Delhi 110 007

Prof. Sachchidananda
Prof. Emeritus
A.N. Sinha Institute of Social Sciences
157, Kadam Kuan, New Area
Patna 800 003

Prof. Arati Sen
Formerly with, Viswa-Bharti
C/o Dr. Naresh Guha
Purbapalli, Santiniketan 731 235
Dist. Birbhum

Prof. C. Seshadri
Formerly with, NCERT
16, Gangotri Layout, I Cross, II Stage
Mysore 570 009

Prof. G.D. Sharma
Secretary,
University Grants Commission
Bahadurshah Zafar Marg
New Delhi 110 002

Prof. Neerja Shukla
Head, Department of Education
of Groups with Special Needs
NCERT
New Delhi 110 016

Prof. L.C. Singh
Formerly with, NCERT
B-5/134, Safdarjung Enclave
New Delhi 110 029

Shri Sridhar Bandela
Fellow, Academy of H.R.D.
Plot No 324, Phase III
Kamlapuri Colony
Hyderabad 500 073

Prof. N. Vaidya
Formerly with, NCERT
Katwari Road
Nagrota Bagwan
Kangra 176 047

Project Team

	From	To
Project Director		
Prof. A. K. Sharma	23.12.1993	Till Date
Dr. K. Gopalan	13.8.1990	12.8.1993
Chairman (ERIC)		
Prof. A.N. Maheshwari	29.9.1994	Till Date
Prof. A.K. Sharma	1.7.1992	28.9.1994
Prof. R.P. Singh	14.3.1990	30.6.1992
Head DERPP		
Prof. B.R. Goyal	1.5.1997	31.5.1997
Prof. Kuldip Kumar	1.9.1995	30.4.1997
Consultant		
Prof. P.N. Dave	3.4.1991	8.10.1993
Member Secretary (ERIC)		
Prof. Satvir Singh	5.5.1997	Till Date
Prof. N.K. Ambasht	12.8.1993	31.8.1995
Prof. R.M. Kalra	30.9.1991	12.8.1993
Prof. N. Vaidya	12.10.1989	30.9.1991
Coordinator		
Dr. C.G. Venkatesha Murthy	8.10.1993	Till Date
Dr. V.K. Raina	4.4.1991	30.12.1992
Project Fellows		
Shri Sanjay Das	4.3.1994	31.5.1994
Shri Pradeep Mahanty	10.8.1994	21.11.1994
Shri Ramalingam	26.12.1994	2.2.1995
Ms. Nusrut Jehan	28.2.1995	31.5.1995
Ms. T.S. Padma	25.7.1995	4.12.1995
Mrs. Archana Mishra	11.12.1995	24.5.1995
Mrs. Poonam Sharma	29.1.1996	30.5.1996
Ms. Renu Kulshreshtha	16.9.1996	Till Date
Ms. Mily Roy	14.10.1996	31.1.1997
Ms. Sangeeta	8.5.1997	Till Date

Contents

FOREWORD	v
EDITORIAL BOARD	vii
CONTRIBUTORS	ix
PROJECT TEAM	xii
1. Educational Research in India: An Overview A.K. SHARMA	1
2. Philosophy of Education C. SESHADRI	9
3. Sociology of Education SACHCHIDANANDA	19
4. History of Education S.C. GHOSH	40
5. Economics of Education P.R. PANCHAMUKHI	50
6. Psychology of Education P.R. NAYAR	76
7. Mental Health K.D. BROOTA GIRISHWAR MISRA	106
8. Cognitive Processes R.C. MISHRA	128
9. Social Processes K.C. PANDA	147
10. Motivation E.G. PARAMESWARAN	166
11. Creativity and Innovations B.K. PASSI	170
12. Guidance and Counselling ASHA BHATNAGAR	216
13. Curriculum Development VIRINDER K. SABHARWAL	235

14.	Pre-Primary Education RAJALAKSHMI MURALIDHARAN	258
15.	Primary Education P.N. DAVE	273
16.	Secondary Education C.L. ANAND	313
17.	Higher Education G.D. SHARMA	326
18.	Social Science Education V.K. RAINA	339
19.	Science Education N. VAIDYA	354
20.	Mathematics Education J.N. KAPUR	370
21.	Physical and Health Education C.G. VENKATESHA MURTHY KULDIP KUMAR	381
22.	Moral, Art and Aesthetic Education ARATI SEN	392
23.	Educational Technology ONKAR SINGH DEWAL	418
24.	Teaching Strategies L.C. SINGH NIRUPMA JAIMINI	437
25.	Teacher Education—Pre-service and In-service J.N. JOSHI	449
26.	Vocational and Technical Education M. SEN GUPTA	465
27.	Special Education N.K. JANGIRA	495
28.	Open and Distance Education LOKESH KAUL	509
29.	Adult, Continuing and Non-Formal Education N.K. AMBASHT	541
30.	Education of the Scheduled Castes, Scheduled Tribes and Minorities NEERJA SHUKLA	563
31.	Education of Girls and Women USHA NAYAR	595

32.	Demographic Studies in Education and Population Education S.C. BHATIA	639
33.	Ecological and Environmental Studies in Education R.S. AMBASHT	651
34.	Comparative Education GULISTAN J. KERAWALLA	660
35.	Educational Assessment and Evaluation ✓ BISHWA NATH MUKHERJEE	670
36.	Educational Planning and Policy Reserach J.L. AZAD	703
37.	Organisation, Administration and Management of Education T.V. RAO B SRIDHAR	711
38.	Correlates of Achievement P.S. BALASUBRAMANIYAN	723