

# Annual Report

## 2014-2015



NCERT

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी  
NCERT



# N C E R T

**Annual Report 2014-15**

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NCERT

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

*January 2016*

*Pausa 1937*

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Published at the Publication Division, by the Secretary, National Council of Educational Research and Training, Sri Aurobindo Marg, New Delhi 110 016 and printed at Pushpak Press Private Limited, 203-204, DSIDC Sheds, Okhla Industrial Area, Phase-I, New Delhi 110 020.

# Foreword

NCERT, the apex organisation in school education continues to contribute towards India's ongoing journey, remaining committed to improving the quality of school and teacher education in the country. Our mission has been to create a common programme of school education that is universally accessible and affordable and reflected the pluralistic character of India. To this end, we have worked relentlessly to advocate policy changes, facilitate and conduct research in priority areas of school education, and enhance support mechanisms to reach out to the States/UTs, develop curricular materials, nurture the intellectual potential of our children, organise capacity-building programmes, exhibitions, seminars, consultations, etc., thereby strengthening support structures for providing quality education in a socially inclusive environment.

Being an advisory body to the government, the council looks into the policy concerns and provides its views and ideas on various aspects of school education. It implements some of the important schemes like SSA, RMSA, NTSS, EOSE, NSQF, NPEP and AEP which are entrusted to the Council. NCERT is also involved in the Introduction of Yoga in Schools as part of the MHRD's 'Scheme on Quality Improvement in Schools'. NCERT is thriving under the expanded responsibilities, being designated as an academic authority for implementation of the RTE Act, 2009. The Annual Report chronicles the achievements and milestones of the Council in the year 2014-15.

During the year, NCERT consolidated its efforts in addressing the research needs of school education by way of undertaking research to explore lateral entry students' engagement with school, CCE practices and its impact, analysis of curricular materials and evolving classroom process framework and analyse textbooks from gender perspective. This year, Council has prepared subject-wise report in language, mathematics and environmental studies based on National Achievement Survey – Class V (cycle-3) data and also have released the Eighth All India School Education Survey. Through its ERIC funding, the Council has also facilitated researches across the country. The research findings helped to inform action on the ground and to advocate for policy change.

NCERT's major publications during 2014-15 include curriculum and courseware for vocational education, B.Ed textbook – Basics in Education, laboratory manuals, source books, handbooks on quality ECCE, RTE, Learning Indicators and Learning Outcomes and Inclusive Education, guidelines for Special Training of Out-of-School Children. Apart from this, the Council also brought out various issues of its refereed journals. The year also saw development of audio-visual materials, handbooks, training packages in various subject areas, a resource book for theme-based ECCE programme, video series on arts education, Quality Monitoring Tools (QMTs), science, mathematics and geography kits and multimedia modules depicting pedagogy of peace embedded in transaction of subject content. As a response to the capacity-building needs of the country, NCERT organised various training programmes aiming at updating knowledge in the subject areas, dealing with methodological and pedagogical concerns, continuous assessment, inclusive education and imparting appropriate technology and pedagogic practices in the classrooms. The Council also organised various international, national and regional seminars/conferences to address/discuss on the emerging trends in vocational education, the issues related to language pedagogy, inclusive education, science and mathematics education, etc.

The NCERT, as an institution with resilient foundation and value systems, also took upon the challenge of addressing the issues of 'equity and access' in education by strengthening the inclusive system of education. For enhancing the learning of the differently-abled students, the Council developed multimedia packages for children with autism and tactile map-book for visually challenged. As part of our ongoing contribution to skill development and in keeping with the governments emphasis on the skills as a means of social inclusion and equitable growth, NCERT organised international conference on TVET, developed competency-based modular curricula for various sectors and job roles in line with the NSQF and also prepared master trainers who will further spread awareness. The Council also conducted various programmes exclusively for the marginalised and disadvantaged communities keeping in mind the uplift of the downtrodden by way of providing quality education.

With a view to extend its reach and amplitude, NCERT ventured into digitisation of education. This year, the Council was involved in developing resources for NROER, has initiated online course on Action Research and also included online mode in its ongoing one-year P.G Diploma course in Guidance and Counselling. Through the initiative called ICT @ schools scheme, we continue to utilise digital resources to reach out to the last child in the last school. During the year, NCERT made 493 audio-visual programmes on different facets of education. We also cater to the needs of teacher education in the country by way of conducting innovative pre-service teacher education courses and engaging demonstrational model schools in our regional institutes.

We promoted the culture of innovation among teachers and teacher-educators by organising competitions and providing awards. The National ICT awards were given to nine teachers for providing ICT-aided learning process. In the All India Children's Educational Audio-Video Festival, 23 awards were given for best productions and individual excellence awards to audio and video programmes and ten schools/institutions were provided awards for Innovative Practices and Experiments in Education. In order to identify and nurture the scientific curiosity and creativity of the young talents in the country, the Council conducted its 41st JNNSMEE in Chandigarh wherein 306 students from 180 schools showcased their projects.

I would like to thank all my colleagues across the country for their unflinching commitment and untiring efforts to reinforce the education system in the country. I would like to place on record my sincere appreciation to the faculty of PMD, Dr Ashita Raveendran and Dr P.D. Subhash, under the guidance of Professor M. Siraj Anwar, for preparation of this report.

We hope that the projects undertaken and that has been planned by the Council will help to propel the next phase of growth towards the common school system, work and education, inculcating values and letting all children enter the world of formal learning. As this report underscores, we remain committed to our mission of ensuring equity and quality education. I place this report of achievements and milestones of NCERT for the year 2014-15, to facilitate valuable communication with a wider academic community, policy-makers, educators and practitioners in the field.

New Delhi  
December 2015

H.K. Senapaty  
*Director*  
National Council of Educational  
Research and Training

# Abbreviations

<b>ABL</b>	Activity Based Learning
<b>AC</b>	Academic Committee
<b>AE</b>	Adolescent Education
<b>AEP</b>	Adolescent Education Programme
<b>AIL</b>	Art Integrated Learning
<b>AISES</b>	All India School Education Survey
<b>APEID</b>	Asia-Pacific Programme of Educational Innovation for Development
<b>ARC</b>	Adolescence Resource Centre
<b>ARSH</b>	Adolescent Reproductive and Sexual Health
<b>AWP</b>	Annual Work Plan
<b>B.A.Ed.</b>	Bachelor of Arts and Education
<b>BAS</b>	Bhartiya Adhunik Shiksha
<b>B.Ed.</b>	Bachelor of Education
<b>BRC</b>	Block Resource Centre
<b>BRCC</b>	Block Resource Centre Co-ordinator
<b>B.Sc. B.Ed.</b>	Bachelor of Science and Bachelor of Education
<b>B.Sc. Ed.</b>	Bachelor of Science Education
<b>CAPE</b>	Comprehensive Access to Primary Education
<b>CBT</b>	Competency Based Teaching
<b>CCE</b>	Continuous and Comprehensive Evaluation
<b>CCT</b>	Computers and Communication Technology
<b>CIET</b>	Central Institute of Educational Technology
<b>CLASS</b>	Computer Literacy and Studies in Schools
<b>CoL</b>	Commonwealth of Learning
<b>CRCC</b>	Cluster Resource Centre Co-ordinator
<b>CSS</b>	Centrally Sponsored Scheme
<b>CTE</b>	College of Teacher Education
<b>CTES</b>	Certificate Programme for Teaching of Elementary School Science
<b>CWSN</b>	Children with Special Needs
<b>DAB</b>	Departmental Advisory Board
<b>DCGC</b>	Diploma Course in Guidance and Counselling
<b>DEAA</b>	Department of Education in Arts and Aesthetics
<b>DEE</b>	Department of Elementary Education
<b>DEGSN</b>	Department of Education of Groups with Special Needs
<b>DEL</b>	Department of Education in Languages
<b>DEPFE</b>	Department of Educational Psychology and Foundations of Education
<b>DER</b>	Department of Educational Research
<b>DESM</b>	Department of Education in Science and Mathematics
<b>DESS</b>	Department of Education in Social Sciences

<b>DEO</b>	District Education Officer
<b>DETR</b>	Directorate of Educational Research and Training
<b>DGS</b>	Department of Gender Studies
<b>DIET</b>	District Institute of Education and Training
<b>DMS</b>	Demonstration Multipurpose School
<b>DRC</b>	District Resource Centre
<b>DSERT</b>	Department of State Educational Research and Training
<b>DTE</b>	Department of Teacher Education
<b>EC</b>	Executive Committee
<b>ECCE</b>	Early Childhood Care and Education
<b>EDUSAT</b>	Educational Satellite
<b>ELP</b>	Early Literacy Programme
<b>EFA</b>	Education for All
<b>ERIC</b>	Educational Research and Innovations Committee
<b>ESD</b>	Educational Survey Division
<b>ESMP</b>	Early School Mathematics Programme
<b>EVS</b>	Environmental Studies
<b>HRD</b>	Human Resource Development
<b>IAB</b>	Institute's Advisory Board
<b>IASE</b>	Institute of Advanced Studies in Education
<b>ICT</b>	Information and Communication Technology
<b>IDGC</b>	International Diploma Course in Guidance and Counselling
<b>IEDC</b>	Integrated Education for Disabled Children
<b>IGNOU</b>	Indira Gandhi National Open University
<b>IIT</b>	Indian Institutes of Technology
<b>IISER</b>	Indian Institutes of Science Education and Research
<b>INSET</b>	In-service Education of Teachers
<b>IRD</b>	International Relations Division
<b>ITPD</b>	In-service Teacher Professional Development
<b>JIE</b>	Journal of Indian Education
<b>JNNSMEE</b>	Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children
<b>KGBV</b>	Kasturba Gandhi Balika Vidyalaya
<b>KRP</b>	Key Resource Person
<b>KVS</b>	Kendriya Vidyalaya Sangathan
<b>LDD</b>	Library and Documentation Division
<b>MC</b>	Management Committee
<b>MDS</b>	Maharshi Dayanand Saraswati University
<b>M.Ed.</b>	Master of Education
<b>MHRD</b>	Ministry of Human Resource Development
<b>MPST</b>	Madhya Pradesh Council of Science and Technology
<b>MOOC</b>	Massive Open Online Course
<b>NAS</b>	National Achievement Survey

<b>NBT</b>	National Book Trust
<b>NCERT</b>	National Council of Educational Research and Training
<b>NCF</b>	National Curriculum Framework
<b>NCFTE</b>	National Curriculum Framework for Teacher Education
<b>NCR</b>	National Capital Region
<b>NCT</b>	National Capital Territory
<b>NCTE</b>	National Council for Teacher Education
<b>NDU</b>	National Documentation Unit
<b>NEHU</b>	North Eastern Hill University
<b>NE-RIE</b>	North-East Regional Institute of Education
<b>NER</b>	North East Region
<b>NGO</b>	Non-Governmental Organisation
<b>NIE</b>	National Institute of Education
<b>NIOS</b>	National Institute of Open Schooling
<b>NIT</b>	National Institutes of Technology
<b>NOS</b>	National Occupation Standard
<b>NPE</b>	National Policy on Education
<b>NPEP</b>	National Population Education Project
<b>NRG</b>	National Resource Group
<b>NROER</b>	National Repository of Open Educational Resources
<b>NSDA</b>	National Skill Development Agency
<b>NSDC</b>	National Skill Development Corporation
<b>NSQF</b>	National Skills Qualifications Framework
<b>NTS</b>	National Talent Search
<b>NTSE</b>	National Talent Search Examination
<b>NVS</b>	Navodaya Vidyalaya Samiti
<b>PAB</b>	Project Approval Board
<b>PAC</b>	Programme Advisory Committee
<b>PD</b>	Publication Division
<b>PGDGC</b>	Post Graduate Diploma in Guidance and Counselling
<b>PGT</b>	Post Graduate Teacher
<b>Ph.D.</b>	Doctor of Philosophy
<b>PINDICS</b>	Performance Indicators
<b>PMD</b>	Planning and Monitoring Division
<b>PMOST</b>	Programme of Mass Orientation of School Teachers
<b>PoA</b>	Programme of Action
<b>PSSCIVE</b>	Pandit Sunderlal Sharma Central Institute of Vocational Education
<b>QMT</b>	Quality Monitoring Tools
<b>RFD</b>	Results Framework Document
<b>RIE</b>	Regional Institute of Education
<b>RMSA</b>	Rashtriya Madhyamik Shiksha Abhiyan
<b>RPDC</b>	Regional Production-cum-Distribution Centre
<b>SC</b>	Scheduled Castes

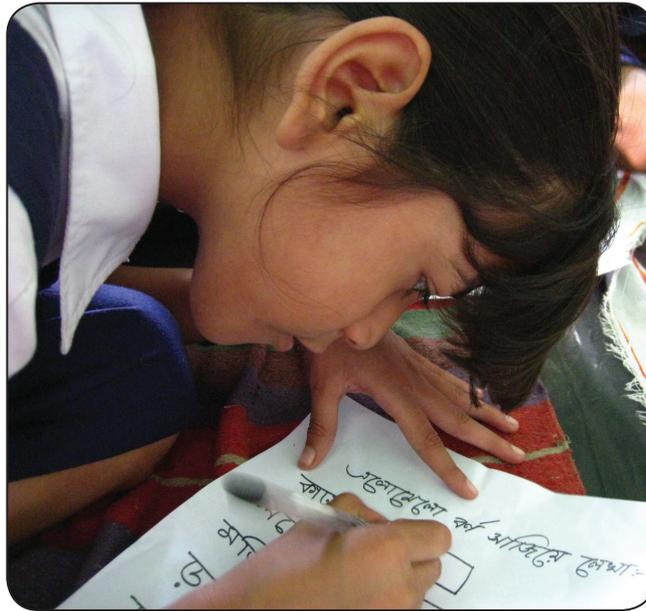
<b>SCC</b>	State Coordination Committee
<b>SCERT</b>	State Council of Educational Research and Training
<b>SCP</b>	Scheduled Caste Plan
<b>SDMC</b>	School Development and Management Committee
<b>SE&amp;L</b>	School Education and Literacy
<b>SIE</b>	State Institute of Education
<b>SIEMAT</b>	State Institute of Educational Management and Training
<b>SIET</b>	State Institute of Educational Technology
<b>SLSMEE</b>	State Level Science, Mathematics and Environment Exhibitions
<b>SMC</b>	School Management Committee
<b>SPMC</b>	Screening-cum-Progress Monitoring Committee
<b>SPD</b>	State Project Director
<b>SSA</b>	Sarva Shiksha Abhiyan
<b>ST</b>	Scheduled Tribes
<b>TGT</b>	Trained Graduate Teacher
<b>TISS</b>	Tata Institute of Social Sciences
<b>TLM</b>	Teaching Learning Material
<b>TSG</b>	Technical Support Group
<b>TSP</b>	Tribal Sub Plan
<b>TVET</b>	Technical and Vocational Education Training
<b>UGC</b>	University Grants Commission
<b>UNDP</b>	United Nations Development Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organisation
<b>UNEVOC</b>	UNESCO International Project on Technical and Vocational Education
<b>UNFPA</b>	United Nations Population Fund
<b>UNICEF</b>	United Nations Children's Fund
<b>WWC</b>	Working with Community
<b>UT</b>	Union Territory
<b>VET</b>	Vocational Education and Training

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हमारे सामने विभिन्नताओं को खत्म करने की चुनौती नहीं है बल्कि उनके साथ रहते हुए एक रहने की है।

- रवीन्द्रनाथ टैगोर



*'The Problem is not how to wipe out the differences but how to unite with the differences intact.'*

- Rabindranath Tagore

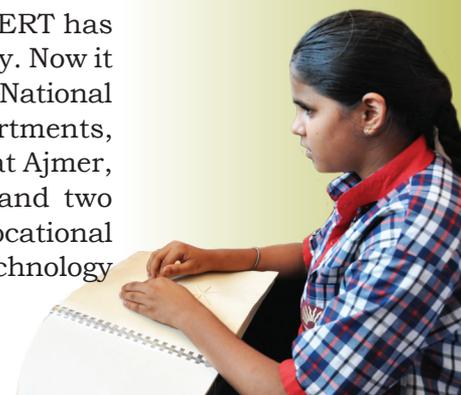


## 1. Overview

The National Council of Educational Research and Training (NCERT) was registered as a society under the Registration of Societies Act (Act XXI of 1860) on June 6, 1961 and the establishment of the Council was announced by the Ministry of Education, Government of India in its resolution of July 27, 1961. It formally began its work on September 1, 1961. The Council was set up by the government to assist and advise the Central and State Governments on policies and programmes for qualitative improvement in school education. The major objectives of NCERT are to:

- ❑ undertake, promote and coordinate research in areas related to school education;
- ❑ prepare and publish model textbooks, supplementary material, newsletters, journals and develops educational kits, multimedia digital materials, etc.
- ❑ organise pre-service and in-service training of teachers;
- ❑ develop and disseminate innovative educational techniques and practices;
- ❑ collaborate and network with state educational departments, universities, NGOs and other educational institutions;
- ❑ act as a clearing house for ideas and information in matters related to school education; and
- ❑ act as a nodal agency for achieving the goals of Universalisation of Elementary Education.

The Council came into existence by merging seven institutions established in the initial decade after independence, namely, Central Institute of Education (1947), the Central Bureau of Textbook Research (1954), the Central Bureau of Educational and Vocational Guidance (1954), Directorate of Extension Programme for Secondary Education (1958) [initially established as the All India Council for Secondary Education in 1955], the National Institute of Basic Education (1956), the National Fundamental at Education Central (1956), and the National Institute of Audio-Visual Education (1959). The amalgamation of these institutions indicated a need to develop a holistic view of education in the country. Over the years, the structure and functions of the NCERT has been modified to cater to the changing educational needs of the country. Now it flourishes with institutions located at different parts of the country viz., National Institute of Education (NIE) at New Delhi consisting of seventeen departments, divisions and cells; five Regional Institutes of Education (RIE) located at Ajmer, Bhopal, Bhubaneswar, Mysore, and NERIE, Umiam (Meghalaya); and two central institutes, viz., Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) at Bhopal and Central Institute of Educational Technology (CIET) at New Delhi.

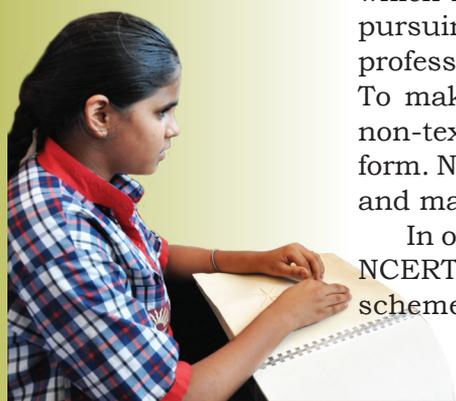


NCERT as an apex national body launched a process of rethinking education, national in character and at the same time facilitating and encouraging the expression of the varied culture across the country. To many a layman, NCERT is synonymous with publication of textbooks. Indeed NCERT has produced generations of textbooks for school children on science, social sciences and languages, latest being the textbooks based on the *National Curriculum Framework*, 2005. Yet, true to its name, NCERT works on the entire gamut of school education be it conducting research in school education, conducting innovative pre-service and in-service teacher training programmes or synergising the state level education organisations like SCERTs, DIETs, etc., in every possible way.

The Council played a significant role by providing survey, research and development inputs in the formulation of the *National Policy on Education* (NPE-1986) and Programme of Action (POA-1992). As a follow-up of NPE and POA, NCERT brought out the 'National Curriculum for Elementary and Secondary Education: A Framework (1988), and subsequently the guidelines and syllabi for all stages of school education. Towards the implementation of the National System of Education, i.e., 10+2+3 system in the country, NCERT provided inputs in terms of development of the National Curriculum Frameworks followed by the preparation of syllabi, instructional materials, evaluation tools and innovative teacher training programmes. Evaluation of students' learning outcomes and curriculum development for teacher education has been yet another important area of activity.

NCERT is dedicated to the cause of teacher education in the country. In order to prepare teachers, the Council runs pre-service teacher education courses such as four year BSc.B.Ed, BA.B.Ed, and two year B.Ed. courses in its Regional Institutes of Education. It also runs one-year P.G. Diploma Course in Guidance and Counselling. Short modules in-service teacher training programmes are also organised to acquaint teachers with the latest developments in their respective fields. In order to encourage excellence amongst teachers, National Awards for Teacher Education, National Awards for Innovations in School Education, National Awards for Promotion of Vocational education are endowed to teachers for their contributions towards innovations and experiments. NCERT provides a platform for encouraging excellence and innovation in children. It has worked for popularisation of science education, social science education, population education, environmental education, non-formal education, education of disadvantaged and marginalised groups, etc. through exhibitions, competitions and a host of other activities. NCERT conducts the prestigious National Talent Search Examination (NTSE) in which 1000 meritorious children are provided with scholarships every year for pursuing courses in sciences and social sciences up to doctoral level and in professional courses like medicine and engineering up to second-degree level. To make learning joyful, NCERT has produced several supplementary and non-textual materials both for teachers and students in print and in electronic form. NCERT has also developed equipment and kits for experiments in science and mathematics.

In order to establish meaningful linkages and partnerships with the states, NCERT has provided academic inputs in several central sector projects/schemes such as Vocationalisation of Secondary Education, Non-Formal



Education Programmes for children of 6-14 years age group, Educational Technology, Special Orientation Programme for School Teachers (SOPT), Programmes of Mass Orientation of School Teachers (P-MOST), Scheme of Improvement of Science Education in Schools, Environmental Orientation of School Education, Computer Literacy and Studies in Schools (CLASS), Operation Blackboard (OB) Scheme, Scheme for Integrated Education of the Disabled, *Sarva Shiksha Abhiyan* (SSA), Promotion of Yoga in Schools, Pre-service and In-service teacher education programmes, etc.

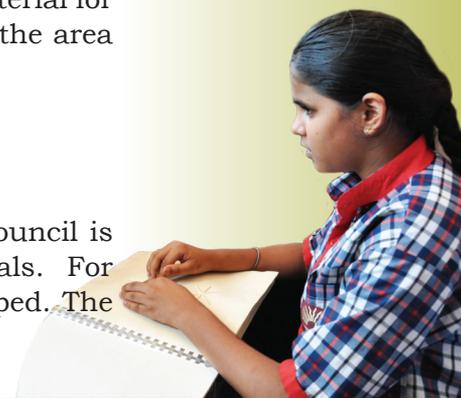
Over the years, Council has undertaken significant projects funded by international agencies which provided the basic data for the formulation of policies, plans and programmes of education. Some of them are: International Association for the Evaluation of Educational Achievement (IEA) Study, Primary Education Curriculum Renewal (PECR), Study on Achievements in Language and Science, IEA CompEd Study, Developmental Activities in Community Education and Participation (DACEP), Comprehensive Access to Primary Education (CAPE), District Primary Education Programme (DPEP), National Population Education Project (NPEP), Survey of Secondary Schools, Achievement Motive in High School Boys and Training for it, Scholastic Aptitude Tests in Hindi for Grades VIII and XI, Evaluative Criteria for Inspection and Supervision in Secondary Schools, Wastage and Stagnation in Primary and Middle Schools, Survey of Achievement in Mathematics at three levels of School Education, Identification of Talent in Elementary and Secondary Schools, Curriculum and Methods of Teaching Mathematics in Secondary Schools, etc.

Some other major initiatives of NCERT in recent years include: implementation and dissemination of *National Curriculum Framework* (NCF-2005); National Centre for Computer Education; publishing of Journals – Peace Education and Educational Abstracts; launching of Eighth All India School Education Survey; National Consultative Meet on Education for Life; preparation for launching of on-line programmes in some areas; development of Crystal Structure Kit; International Diploma Course in Guidance and Counselling through Distance/Online Mode in Collaboration with Commonwealth of Learning (CoL); Diploma Course in ECCE; Training Course on Peace Education; preparation of customised training package for teachers of KGBV and development of bridge course for KGBV girls; development of textbooks in media studies, Human Ecology and Family Sciences (HEFS), Indian Art, Heritage Crafts and Graphic Design; and translation of textbooks and supplementary reading materials into Urdu; Early Literacy Programme and Early School Mathematics Programme to enhance literacy and numeracy in early grades (I and II); implementation of National Population Education Project (NPEP) and Adolescence Education Programme (AEP), addressing the need of States/UTs for support material for In-service Teacher Professional Development (ITPD) programmes in the area of secondary education, etc.

## **CURRENT CONCERNS**

### ***Digitising Education***

Recognising the potential of technology in teaching-learning, the Council is involved in the development of various innovative curricular materials. For ensuring easy access to the students e-textbooks have been developed. The



Council is involved in the development of various audio-video programmes and interactive multimedia programmes to support the enhancement of teaching and learning. With a view to reach out to the masses, the Council is involved in developing e-content material and introducing online courses. The Council endeavours to bring together all digital and digitisable resources for the students in all subjects and all languages through NROER.

### ***New Education Policy***

NCERT as a think-tank and the advisory body to the government in matters concerning school education has initiated the process of bringing together the stakeholders of school education in the consultation process of new education policy to ensure that an inclusive, participatory and holistic approach is undertaken. The Council has been directed to undertake national level consultation/deliberation in a structured manner covering all the States and UTs. It shall propose for the revisions in the education policy taking into consideration expert opinions, field experiences, empirical research, stakeholder feedback, as well as lessons learned from best practices.

### ***Environmental Orientation***

With a view to take up educational programmes that match with the local environmental situation and concerns, NCERT intends to hold awareness programmes, capacity-building programmes and also conduct research activities under the scheme Environmental Orientation to School Education.

### ***National Skill Quality Framework***

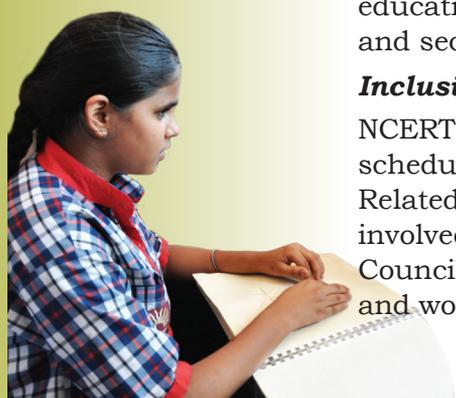
NCERT is involved in the development of competency-based curriculum for vocational courses in tune with the National Skills Qualification Framework (NSQF) that aims to enable a person to acquire desired competency levels, transit to the job market and, at an opportune time, return for acquiring additional skills to further upgrade their competencies. The Council looks into designing and developing guidelines, curricula and teaching-materials for the States/UTs. NCERT intends to work on the directions gathered from the international conference on TVET for the enhancement of prestige of TVET programmes and improving systems providing education and training throughout life.

### ***Addressing Gender Concerns***

NCERT looks into the issues, concerns and problems related to education of girls and women and works for promoting women's equality and empowerment. The Council with the objective of providing education to girls and ensuring their full enrolment, develops bridge courses for girls entering into school education at age appropriate classes and also imparts training for the safety and security of girls.

### ***Inclusive System of Education for All***

NCERT deals with issues and problems related to education of scheduled castes/scheduled tribes, minorities, disabled and other groups with special needs. Related research, development, training and networking with organisations involved in similar activities are also being carried out by the Council. The Council analyses and facilitates good inclusive practices at the grassroot level and works for capacity-building of organisations and functionaries. Adequate

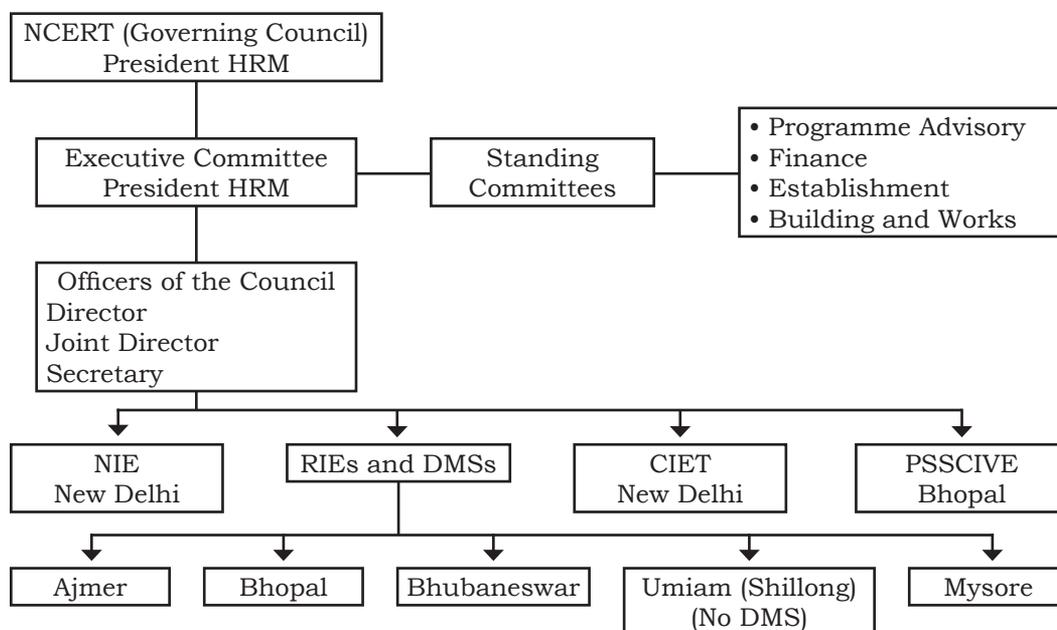


steps need be taken for education of every category of disabled person as an integral part of education system and combat for eliminating discriminatory attitudes of students and teachers and creating a community that is receptive towards inclusive education.

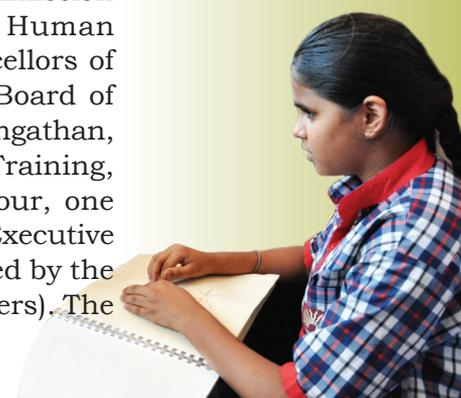
**Implementing Right to Education Act, 2009**

NCERT has been designated as an academic authority under the RTE Act, 2009 for curriculum and evaluation procedures in respect of schools owned, controlled and managed by the central government and of the schools in respect of Union Territories without legislature. The Council looks into the status of implementation of various provisions of RTE Act, 2009 and also concerns and problems in States and UTs. In order to facilitate concerned officials who will be involved in performing their roles and responsibilities, they are oriented and empowered for implementing the task of special training and its related aspects. To this end, NCERT has taken initiative to develop a handbook on RTE for teachers and also guidelines for special training of out-of-school children admitted in age appropriate classes under RTE Act, 2009.

**ORGANISATIONAL STRUCTURE**



The General Body of NCERT comprises of the Education Ministers of all States and Union Territories, Chairperson of the University Grants Commission (UGC), the Secretary to the Government of India, Ministry of Human Resource Development (Department of Education), four Vice-Chancellors of Universities (one from each region), the Chairman of the Central Board of Secondary Education, the Commissioner of the Kendriya Vidyalaya Sangathan, the Director, Central Health Education Bureau, the Director of Training, Directorate General of Training and Employment, Ministry of Labour, one representative of the Education Division, NITI Aayog, members of the Executive Committee of the Council and nominees, not exceeding six, nominated by the Government of India (not less than four of them shall be school teachers). The



Union Minister of Human Resource Development is the President (ex-officio) and the Secretary, NCERT is the Convener of the General Body of NCERT.

The Executive Committee is the main governing body of NCERT. The committee generally carries out the objectives of the Council as set forth in the Memorandum of Association and controls the management of all the affairs and funds of the Council. The Union Minister of Human Resource Development is its President (ex-officio) and the Union Minister of State in the Ministry of Human Resource Development is the Vice-President (ex-officio). The members of the Executive Committee are Director, NCERT; the Secretary to the Government of India, Ministry of Human Resource Development (Department of Education); Chairperson of the University Grants Commission; four educationists well known for their interest in school education (two of whom shall be school teachers); the Joint Director, NCERT; three members of the faculty of NCERT (of whom at least two are of the level of Professor and Head of Department); one representative of the MHRD and one representative of the Ministry of Finance (who is the Financial Adviser of NCERT). The Secretary, NCERT is the Convener of the Executive Committee. The Executive Committee is further assisted in its work by the following Committees/Boards:

- ❑ Finance Committee
- ❑ Establishment Committee
- ❑ Building and Works Committee
- ❑ Programme Advisory Committee
- ❑ Educational Research and Innovations Committee
- ❑ Academic Committee of the NIE
- ❑ Advisory Board of the Central Institute of Educational Technology
- ❑ Advisory Board of Pandit Sunderlal Sharma Central Institute of Vocational Education
- ❑ Managing Committees of the Regional Institutes of Education
- ❑ Advisory Boards of the Departments of NIE



101st Executive Committee Meeting of NCERT at Vigyan Bhawan, New Delhi



52nd General Council Meeting

### **Meetings held in the year 2014-15**

52nd meeting of the General Council of NCERT was held on February 3rd, 2015 at Vigyan Bhawan, New Delhi which was chaired by Hon. Minister for Human Resource Development, Smt Smriti Zubin Irani. 100th Executive Committee Meeting and 101st Executive Committee Meeting were held on September 24th, 2014 and February 3rd, 2015, respectively. 126th Finance Committee meeting and 127th Finance Committee meeting were held on June 3rd, 2014 and February 24th, 2015, respectively.

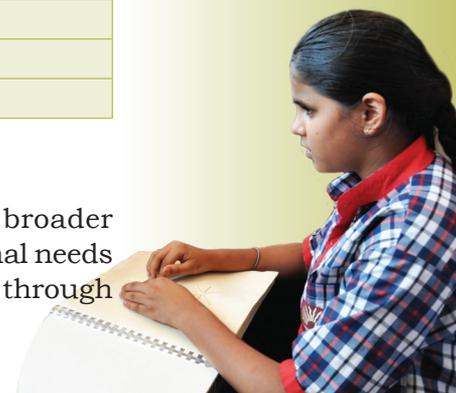
### **SENIOR FUNCTIONARIES OF THE NCERT**

The functions of the Council are looked after by the Director, Joint Director and Secretary. The Dean (Research) coordinates the research programmes and looks after the work of the Educational Research and Innovations Committee (ERIC); the Dean (Academic) coordinates the work of the departments of NIE.

<b>Senior Functionaries of the NCERT 2014-15</b>	
Director	Professor Parvin Sinclair (upto 20th October 2014) Professor B.K.Tripathi (Acting Director from 21st October 2014)
Joint Director	Professor B.K. Tripathi
Secretary	Smt Sudeshna Sen
Joint Director (CIET)	Professor Rajaram S. Sharma
Joint Director (PSSCIVE)	Professor R.B. Shivagunde
Dean (Research)	Professor B.K. Tripathi
Dean (Academic)	Professor Saroj Bala Yadav

### **PLANNING AND PROCESSING OF PROGRAMMES**

The programmes of NCERT are formulated keeping in view the broader perspectives of the *National Policy on Education* (NPE) and the educational needs of the states. The educational needs of the states are identified mainly through



the mechanism of the State Co-ordination Committees (SCCs) which provide a forum for interaction of the NCERT faculty with the senior functionaries of the state education departments. The Education Secretary of the respective states is the chairperson of the SCC and the Principal of the concerned Regional Institute of Education (RIE) is the member-convener. The identified educational needs of the states are first considered by the Institutes Advisory Boards (IABs) of RIEs and then by the Managing Committees (MCs) of RIEs.

The academic programmes of the departments/divisions/cells of the NIE are processed through the Advisory Boards of the individual departments (DABs) and thereafter by the Academic Committee (AC). Programmes of the CIET and PSSCIVE are processed through their respective Institute Advisory Boards (IAB). The programmes processed by various committees are finally considered by the Programme Advisory Committee (PAC). It is the responsibility of the committee to consider all plans, programmes, research proposals, etc., and to examine the academic aspects of the work of the Council and to ensure a coordinated approach to the development of the programmes. The PAC reports to the Executive Committee of NCERT regarding the overall directions in which research, training, extension and other programmes would be channelised to best serve the interest of school education in the country.

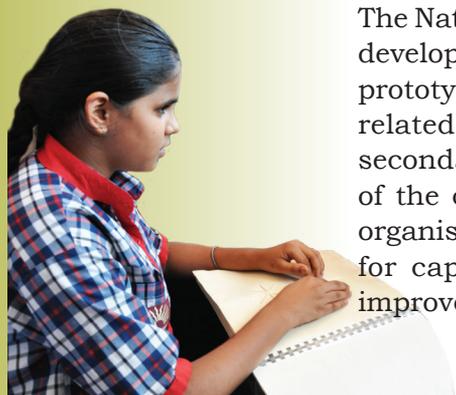
Conducting and sponsoring educational research is one of the major activities of NCERT. Research programmes proposed by the constituents of the NCERT and other institutions/ organisations are considered by the Educational Research and Innovations Committee (ERIC). ERIC promotes and sponsors research in various areas of school education and teacher education.

The major constituent units of NCERT which are located in different regions of the country are:

- ❑ National Institute of Education (NIE), New Delhi
- ❑ Central Institute of Educational Technology (CIET), New Delhi
- ❑ Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal
- ❑ Regional Institute of Education (RIE), Ajmer
- ❑ Regional Institute of Education (RIE), Bhopal
- ❑ Regional Institute of Education (RIE), Bhubaneswar
- ❑ Regional Institute of Education (RIE), Mysore
- ❑ North-East Regional Institute of Education (NERIE), Umiam (Meghalaya)

### **National Institute of Education**

The National Institute of Education (NIE) in New Delhi undertakes research and development activities related to pedagogical aspects of curriculum; prepares prototype curricular and supplementary materials; develops school education related database and undertakes experiments in pre-school, elementary, secondary and higher secondary stages to support all-round development of the child. NIE conducts short term/long term courses/programmes and organises in-service training of key resource persons and teacher educators for capacity building and implementation of centrally-sponsored school improvement schemes.



The major Departments/Divisions/Cells of NCERT located at NIE, New Delhi are:

## **1. DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS**

The Department of Education in Science and Mathematics (DESM) is a think-tank for education in science, mathematics and environment education at upper primary, secondary and higher secondary stages of school education. The department focuses on research, development, training, consultancy, evaluation and extension activities in these subject areas.

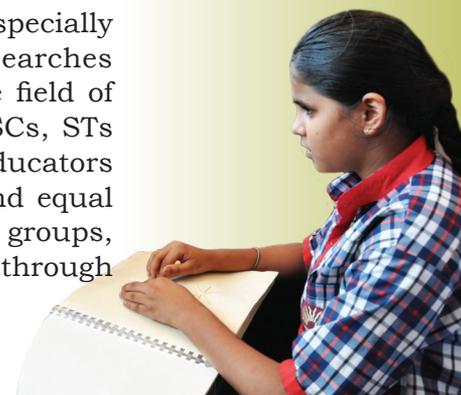
The department carries out researches related to curriculum design, curriculum transaction, teaching-learning strategies and their impact in science, mathematics and environment education at the school level. The Instructional Material Centre (IMC) of the department undertakes collection and dissemination of information on all aspects of science, mathematics and environmental education. The other major extension activities of the department include designing and development of science and mathematics laboratories, development of science and herbal park, publication of a quarterly journal 'School Science' and monitoring the implementation of environment education in States/UTs.

In order to strengthen teaching in science, mathematics and environmental education in schools, the department organises orientation programmes for teachers and master trainers of States and UTs. To facilitate quality of pupil evaluation in school, the department developed exemplar problems in science and mathematics for all stages. For the purpose of strengthening the science education in the country, and to collect feedback on NCERT material in science and mathematics, the department provides its expertise and consultancy to outside agencies and institutions.

The department has also been engaged in the development of materials for popularisation of science, promotion of innovative laboratory practices in science and mathematics and organisation of out-of-school activities in science. Every year, the department organises Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children, which is the culmination of the series of Science Exhibitions for Children organised at district, zonal and state levels.

## **2. DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS**

The department works in the area of education of children with special needs and children belonging to socially disadvantaged groups, such as SCs, STs and minorities. It strives to implement an inclusive system of education for all children which assumes greater significance for systemic reforms especially in the context of RTE Act, 2009. The department conducts researches to review the existing activities and suggest new initiatives in the field of education of children with special needs and those belonging to SCs, STs and the minorities. For sensitising and training teachers, teacher-educators and policy makers in strategies for providing quality education and equal educational opportunities to children belonging to the vulnerable groups, the department engages in various capacity-building programmes through face-to-face and online mode.



The department provides support for the development of inclusive curriculum and textbooks at the national and state levels, designs appropriate pedagogy, suggests reforms in the examination procedures from the perspective of groups with special needs, develops teachers' guides, manuals, index for inclusion, training guidelines and literacy curriculum (Braille and others) and also extends resource support to the Centre, States, NGOs and international and national level agencies for inclusion of CWSN in education. It also acts as a network between various departments, organisations and people involved in the education of special focus groups and provides resource support for activities under the SSA and RMSA for CWSN. The department hosts a minority cell with a view to focus on promotion of education and welfare of minorities.

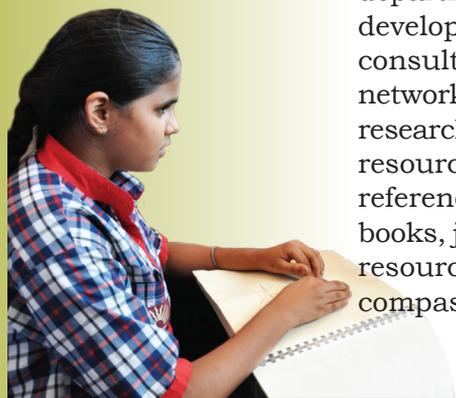
### **3. DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION**

The department through its research, training and development programmes has been instrumental in realising NCERT's objectives of bringing about qualitative improvement in school and teacher education, providing psychological inputs to different aspects of school education, such as curriculum planning, textbook writing, teacher training, assessment, etc. The focus of the department has been primarily in the areas of guidance and counselling, education for peace and values and educational psychology.

Guidance and counselling, the applied area of educational psychology, has been a key concern in terms of research, development of resource materials, training of professionals, and capacity-building at the state level. The department has been offering Post-Graduate Diploma Course in Guidance and Counselling to train professionals for serving as counsellors in schools, since its inception. To begin with, a full-time (nine months) diploma course was offered at the national level by the department. In 2002-03, the department initiated an International Diploma Course in Guidance and Counselling for Asian and African countries, which was then revised and is offered through distance/online mode, in collaboration with Commonwealth of Learning (CoL) for three years, now which is being offered as one-year course.

It has also played a pivotal role in augmenting guidance and counselling at state levels, conducting research in guidance and counselling, developing materials in the form of multi-media packages, setting up guidance centres in schools, organising national conferences to provide guidance and counselling professionals a platform for exchange of experiences as well as conducting various capacity-building programmes in the area.

Recently, the department has taken up issues in value education. The department is undertaking a number of activities and programmes related to development, training, research, coordination, evaluation, dissemination and consultancy in the area of value education. Some of the activities include networking with institutes working in value education in the country, sponsoring researches and innovations, bringing out Journal of Value Education, developing resource and supplementary reading materials, analysing the textbooks with reference to value education inputs, bringing out annotated bibliography of books, journals, articles, research reports and audio-video materials, developing resource materials in the form of modules and monographs on the values like compassion, creativity, excellence and human rights, etc.



In the light of *National Curriculum Framework-2005*, peace education emerged as a significant area of concern. Training courses of six-week duration were organised on peace education for in-service school teachers/teachers-educators across the country. The department has also conducted trainings in collaboration with different SCERTs to build the capacity of state key personnel, teachers and teacher-educators in peace education and helps in networking of trained personnel. Other activities include developing resource book/materials for teacher training ('Ways to Peace'), developing framework in education for values in schools, research on peace and related issues and concerns and disseminating knowledge, researches in the area through National Resource Centre for Value Education (NRCVE).

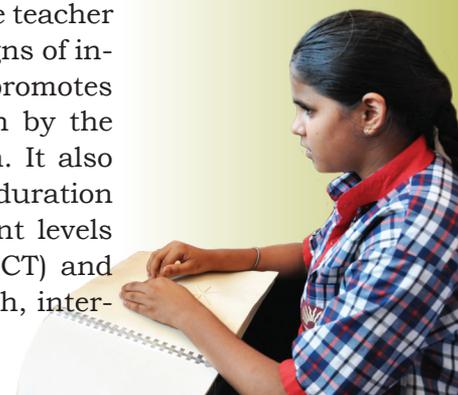
The department has brought out psychology textbooks for the higher secondary stage. It has initiated work to promote awareness among students, parents, teachers and school administrators on the importance of studying psychology at the higher secondary level. The department is involved in organising consultations and workshops for optimising use of psychological knowledge in theory and practice, conducting researches/interventions in different applied areas of educational psychology, training teachers/teacher-educators in psychological foundations of teacher education and extending library services on psychological and education tests, for use of researchers and professionals across the country.

The department also performs dissemination functions through its Resource Centres – National Resource Centre for Value Education (NRCVE), Guidance and Counselling Resource Centre (GCRC) and the National Library of Educational and Psychological Tests (NLEPT).

#### **4. DEPARTMENT OF TEACHER EDUCATION**

Teacher education is the most crucial input for improving the quality of school education. The policies prepared for schools are to be implemented by the teachers, therefore, the teacher's needs have to be prepared first. The department, therefore, addresses itself to the task of formulation and organisation of teacher education programmes both pre-service and in-service. The programmes and activities of the Department of Teacher Education (DTE) focus on research, development of materials and capacity-building of teachers and teacher-educators.

The department performs the policy and advisory role in teacher education and provides technical support to MHRD and States/UTs in formulation, implementation and evaluation of Centrally Sponsored Schemes for qualitative improvement of teacher education. The department reviews pre-service teacher programmes at different levels and also formulates new models/designs of in-service teacher education programmes. Moreover, the department promotes innovations and experimentations in the field of teacher education by the projects like National Awards for Innovations in Teacher Education. It also organises in-service and continuing education programmes of varied duration for teachers and teacher-educators/master trainer/KRPs at different levels utilising emerging Information and Communication Technologies (ICT) and facilities of EDUSAT. The department also undertakes policy research, inter-



disciplinary researches, evaluative studies and comparative studies on issues of teacher education like pre-service teacher education curriculum, in-service training designs, foundation components of pre-service teacher education practices, teaching school/professional experience programmes and pedagogy etc. Besides this, it also develops materials highlighting new approaches of teaching-learning, pedagogy and teacher's training as highlighted in *NCF-2005*, *NCFTE-2009*, *RTE Act-2009* and *NCTE Regulation-2014*.

## 5. DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

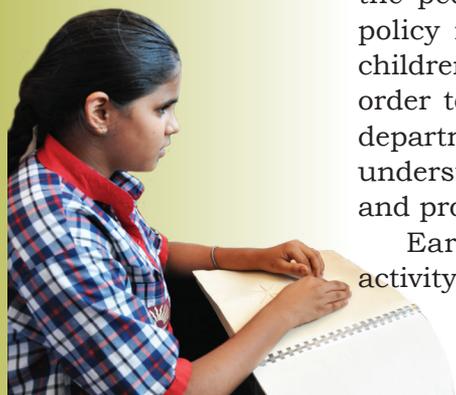
The department undertakes various activities within the broad framework of Universalisation of Elementary Education with the major emphasis on implementation of SSA and RTE Act, 2009. Broadly, department's thrust areas are: Early Childhood Care and Education, Early Literacy, Early School Mathematics and Elementary Education. It also acts as a nodal centre at the national level for the implementation of the SSA activities related to quality improvement at the elementary stage. The National Documentation Unit is a resource centre to develop and maintain information with reference to pre-school and elementary education and acts as a clearing house to disseminate information widely. The department publishes quarterly journals '*The Primary Teacher*' and '*Prathamik Shikshak*' and children's magazine '*Firkee Bachoon Ki*'.

In the area of Early Childhood Care and Education (ECCE), the department conducts need-based research studies, develops resource and exemplar materials for master trainers and grassroot level functionaries, conducts training programmes/national meets/conferences for state level key functionaries in planning, implementing and monitoring of the ECCE programmes. The department provides academic support to I.I.T. Nursery School and other government as well as non-government institutions and disseminates material on ECCE through journals and website.

In the area of elementary education, the department conducts research and programme evaluation studies in the priority areas, develops exemplar guidelines, syllabi and textual materials, assessment and CCE packages, learning indicators and learning outcomes, organises seminars, conferences and consultative meetings etc. The department also conducts capacity-building programmes on important themes and thrust areas in elementary education and document and disseminates innovative/relevant materials through journals and National Documentation Unit.

Under the Early Literacy Programme (ELP), the department has developed the pedagogy of reading in early grades for teachers, teacher-educators, policy makers and curriculum designers. It makes available a variety of children's literature and other resource material to children and teachers in order to enhance early literacy skills among Classes I and II children. The department organises capacity-building programmes under ELP to develop an understanding on reading and writing in early grades, monitoring the progress and providing support to teachers and other functionaries.

Early School Mathematics Programme (ESMP) is another significant activity of the department in which it conducts researches and workout plans



towards Early School Mathematics Programme. For this, the department develops materials and delineating pedagogic strategies for mathematics in early primary grades (Classes I and II) for various stakeholders. The capacity-building programmes for teacher-educators to support States/UTs under ESMP are also organised.

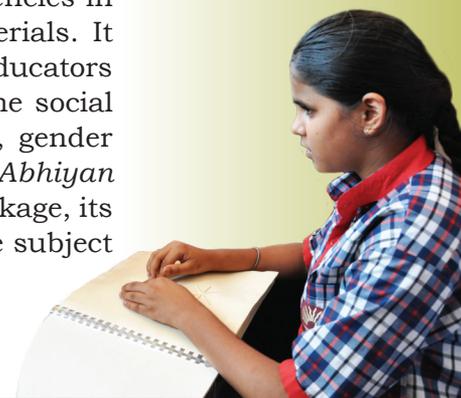
## **6. DEPARTMENT OF EDUCATION IN LANGUAGES**

The Department of Languages was set up on 1 July, 2005 and works actively in promoting language education through development and evaluation of curricula and instructional materials; professional development of teachers, and research in language education. The department has developed curriculum, syllabi, textbooks, and supplementary materials for school education in four languages i.e., Hindi, English, Sanskrit and Urdu. Besides print material, language kits and audio-video material are also developed. The department is instrumental in taking cognisance of significance of language in education policy and developing methods and approaches for classroom processes. The department lays emphasis on empowering teachers through its continuous orientation in both face-to face and teleconferencing modes, and works on innovative strategies and emerging trends in language education.

## **7. DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES**

The department has been working with the objective of bringing qualitative improvement in social sciences and commerce education in schools. Besides social science subjects such as history, geography, political science, economics and sociology, the department is also working in the area of commerce, health, physical education and yoga and human ecology and family sciences.

The department undertakes multifarious activities such as development of model syllabi, textbooks and other instructional materials like teachers' handbook, training manuals, subject-specific trilingual (English, Hindi and Urdu) dictionaries, atlas and supplementary resource materials. Recognising the potential of technology in teaching-learning, the department works on developing various innovative audio-visual and e-learning materials. With a focus on inclusive education, the department has been developing tactile map books, exemplar graphs and materials and videos for inclusive teaching-learning of social science subjects. It has been organising professional development programmes for teachers in new areas such as Geographical Information System (GIS), Application of Mathematics in Economics and Computerised Accounting System. The department collaborates with other constituent units of the NCERT and extends academic support to the various states and central agencies in the development, evaluation and transaction of instructional materials. It conducts orientation and training programmes for teachers, teacher-educators and other stakeholders on the issues and concerns addressed in the social science curriculum and integration of concerns of special groups, gender and marginalised section. Under *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA), the department is engaged with the development of ITPD package, its transaction and development of learning indicators for social science subject areas at the secondary stage.



The department houses the National Population Education Project (NPEP), launched in April 1980, as an educational intervention to help the country attain its demographic goals. The aim is to make learners aware of the relationship between population and sustainable development, include positive attitude and develop responsible behaviour towards these issues. It also implements the Adolescence Education Programme (AEP) of the MHRD since 2005, funded by UNFPA, for imparting knowledge and awareness to learners about Adolescent Reproductive and Sexual Health (ARSH) concerns.

## **8. DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS**

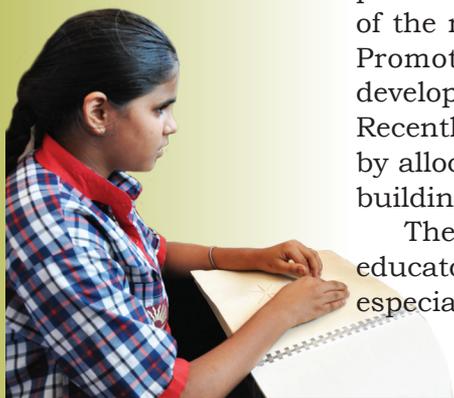
The department was created with a concept to promote all forms of arts in schools by bringing it into the mainstream of country's education system through various activities as research, development, training and extension to unfold the aesthetic potentialities of children for enabling them to become contributing citizens.

The department conducts research studies in various areas of arts education in school and teacher-education; on teaching-learning and evaluation process; impact of arts on learning and development of children; innovation in the field of different art forms; and case studies of best practices in this area, etc. The department prepares teaching-learning materials including textbooks, teachers' handbooks, training materials, supplementary materials including monographs, anthology, audio-visual materials, multi-media programmes process documents etc., for all stages of school education in visual arts, theatre, music and dance. With a view to popularise the arts education, the department conducts capacity-building programmes for in-service teachers, teacher-educators of different levels/stages in art education. The curriculum and syllabus of arts education are periodically reviewed. It also tries to establish a strong network with various national, international, regional, government/non-government organisations, which are actively involved in the area of arts education.

## **9. DEPARTMENT OF GENDER STUDIES**

The department works towards providing gender inputs in re-designing of curriculum, removing gender bias and gender stereotypes, sensitising educational personnel and developing handbooks and teacher training packages for teachers and teacher-educators, to create a schooling environment that is enabling for all. In addition, evaluation of schemes and programmes of Government of India from a gender perspective is an integral part of the department's activities. Development of bridge courses for girls of the marginalised communities is yet another concern of the department. Promotional materials in the form of posters and messages have been developed from time to time to instil gender sensitivity among all stakeholders. Recently, the department has prioritised issues of safety and security for girls by allocating sessions on self-defence for girls and women in all its capacity-building programmes.

The department conducts in-service training programmes for teacher-educators, principals of Jawahar Navodaya Vidyalays (JNVs) and teachers especially working in Kasturba Gandhi Balika Vidyalayas (KGBVs). The focus



of all activities of the department is to build a gender-friendly environment in the society through teaching-learning process. The department is also working extensively towards analysing textbooks published by different states in the domain of languages, science, mathematics, social science for Classes I to VIII from the viewpoint of gender bias and gender stereotype in the light of NCF-2005.

## 10. DIVISION OF EDUCATIONAL RESEARCH

The division is engaged in promoting policy research in education; performing activities of a 'think-tank'; undertaking, coordinating, sponsoring and commissioning research and innovations in school and teacher education; and functioning as the secretariat of Educational Research and Innovations Committee (ERIC). The standing committee of NCERT, called Educational Research and Innovations Committee (ERIC), acts as a catalyst to promote and support research in priority areas of school and teacher education. The ERIC members include eminent researchers in education and allied disciplines from universities and research institutions and representatives of SIEs and SCERTs. The division also awards NCERT Doctoral Fellowships to students working for their doctoral degrees in a university/ research institution. A new scheme of Senior Research Associateships (Educationists'/Researchers' Pool Scheme) of NCERT has been initiated with the objectives of harnessing the young research talent and encouraging them to continue to do innovations and research in the area of school education and teacher education by giving them an opportunity to work in NCERT for a period of two years.

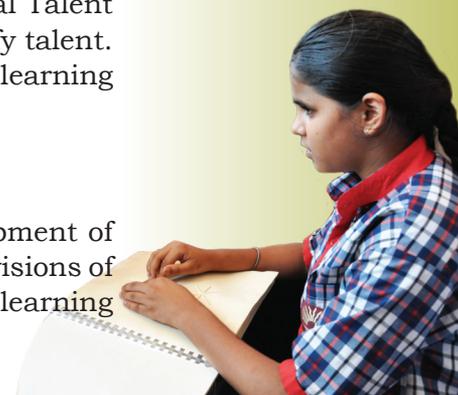
## 11. EDUCATIONAL SURVEY DIVISION

The division was created in 2012 by merging two erstwhile departments of NCERT, namely, Department of Educational Measurement and Evaluation (DEME) and Department of Educational Survey and Data Processing (DES&DP) for the purposes of conducting educational surveys on census and sample basis with a view to provide authentic information (data/database) on various aspects of school education for strengthening the educational planning in the country.

The division creates, maintains and updates periodically the educational database at the national level. It provides training to stakeholders in quantitative research methods, provides central facility for statistical analysis of data pertaining to large-scale surveys/studies/projects conducted by the different constituents of the NCERT. The division organises capacity-building programmes for state resource persons in conducting educational surveys and evaluation issues relating to school education and conducts National Talent Search Examination (NTSE) as a special testing programme to identify talent. The division undertakes research studies in the areas pertaining to learning assessment.

## 12. DIVISION OF EDUCATIONAL KITS

The division provides academic assistance for designing and development of science equipments. It has been one of the important departments/divisions of NIE, New Delhi responsible for augmenting improvement in teaching-learning



in the field of school education supporting print media through hands-on experience by design, development and prototype production of school equipment in the form of kits. The division also provides hands-on training to students/teachers/teacher-educators on the use of various kits produced by it. It conducts various extension activities viz., hands-on activities in science and mathematics for children, participates in annual Jawaharlal Nehru Science, Mathematics and Environment Exhibition for Children, World Book Fairs, World Trade Fair and Global Education Summits.

The division acts as a model division for designing and developing prototype kits in science and mathematics and provides hands-on training to teachers/teacher-educators on use and development of educational kits for all levels of school education. It conducts capacity-building programmes for the faculty of SCERTs/RMSA/SSA/DIETs to initiate hands-on activities down to Cluster and Block Resource Centres in using kits at school level.

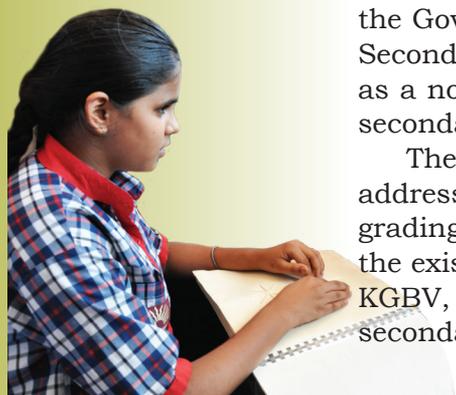
### **13. PLANNING AND MONITORING DIVISION**

The division was created with the purpose of coordinating the process of programme formulation, monitoring, evaluation and submitting periodic reports to the MHRD. It acts as a clearing house in respect to the academic programmes/activities of NCERT and evaluates all Programme Advisory Committee (PAC) approved programmes. It bears the responsibility of designing pertinent strategies of the Council and issue proper guidelines for the implementation of its various programmes. The major activities of the division are: preparation of Results Framework Document (RFD) of NCERT, Annual Report of NCERT, consolidating material collected from various constituents of NCERT for annual report of MHRD, separate statements of programmes proposed including budget for Scheduled Cast Plan (SCP) and Tribal Sub-Plan (TSP), monthly and quarterly including special reports on SC/ST/Minorities, separate reports of the progress of the programmes including expenditure related to North-Eastern Region (NER), general guidelines for formulation of academic programmes, etc. Moreover, the division convenes Programme Advisory Committee meetings, processing the proposals of PAC approved programmes of NIE Departments/Divisions/Cells for administrative-cum-financial sanctions and review of programme proposals for NIE Departments/Divisions/Cells, CIET, PSSCIVE and RIEs for duplication and financial aspects as per recommendations of meetings of the PAC.

### **14. RMSA PROJECT CELL**

*Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) launched in the year 2009 by the Government of India aims to achieve the objective of Universalisation of Secondary Education. The RMSA Framework (MHRD, 2009) envisages NCERT as a nodal agency to implement quality concerns of RMSA so as to improve secondary education in the country.

The RMSA Project Cell was established in NCERT on 26 April 2012 to address all the aspects of RMSA viz., setting up of 6000 model schools, upgrading existing upper primary schools into secondary schools, strengthening the existing secondary schools, improving quality of teachers, upgradation of KGBV, IEDC, vocational education, and looking into the curriculum issues in secondary education.



The RMSA Project Cell advises MHRD on policies and programmes pertaining to secondary education, both in formal and non-formal sectors. It undertakes various activities and programmes within the framework for implementation of RMSA with a focus on research, curricular material development, training and evaluation. As a nodal cell in NCERT for the implementation of RMSA, it also focuses on quality intervention and monitoring dimensions at the secondary stage of schooling.

The cell assists in evolving and improving policies related to curriculum, pedagogy, assessment and teacher education at the secondary stage, supports the implementation of RMSA with an overall objective of improving quality of secondary education, provides academic support to all the States/UTs in the area of curriculum development, adolescence education, guidance and counselling, vocational education, ICT enabled teaching-learning, learning achievement surveys, etc., at the secondary stage. The cell coordinates and collaborates with different agencies at various levels within NIE departments, RIEs, CIET, PSSCIVE, SCERTs, school education boards, secondary teacher education institutions such as IASEs, CTEs, TSG (MHRD) etc., to develop quality management mechanism for RMSA.

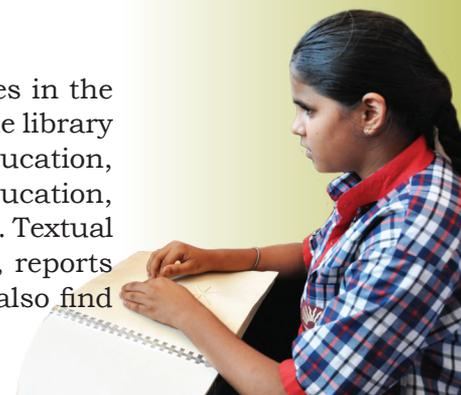
## 15. INTERNATIONAL RELATIONS DIVISION

The division is responsible for coordinating various activities relating to international cooperation. It facilitates exchange of information and experts relating to education system in general and school education in particular – encompassing a wide spectrum of relevant areas, such as, policy perspectives, curriculum framework and curriculum, syllabus, textbooks and other teaching-learning materials, teacher education, vocational education and skill development, ICT, etc. On behalf of NCERT, the division also discharges the functions of the academic secretariat of NDG (National Development Group) constituted by MHRD under UNESCO's international programme, the APEID (Asia Pacific Programme of Educational Innovations for Development). The NCERT is one of the associated centres of the APEID. The APEID related functions of the NCERT as an associated centre include sharing of innovative experiences with other associated centres.

NCERT offers in-service training programmes of varied duration for foreign nationals in different areas of school education and teacher preparation. NCERT sponsors its faculty members for participation in the international seminars, meetings, and training programmes under the aegis of UNESCO, UNICEF and UNDP, etc. The division coordinates all these activities besides receiving foreign delegations and organising meetings for them.

## 16. LIBRARY AND DOCUMENTATION DIVISION

The NCERT library is one of the most resourceful information centres in the country in the field of education and its inter-disciplinary subjects. The library has the largest collection of books on psychology, environmental education, education for special needs groups, literature and languages, value education, adolescence education, science education, social science education, etc. Textual and supplementary reading materials relating to school curriculum, reports of various commissions, educational surveys and policy documents also find a place in the library.



The vision of Library and Documentation Division (LDD) is to create a network of knowledge system that facilitates scientific communication and collaboration for innovative information professionals and their strategic partners. The mission of LDD is to strengthen its members through learning, advocacy and networking initiatives.

The main task of LDD is to supplement the efforts of NCERT in fulfilment of its main objective towards quality improvement of school education. In this context, the main functions are:

- ❑ Collect, organise and disseminate primary, secondary and tertiary resources on school education;
- ❑ Support academics, researchers and students through conventional references and referral services and document delivery services;
- ❑ Facilitate in-services education of library personnel through training programmes, library manuals, etc;
- ❑ Disseminating bibliographies; book reviews, current contents indexing and abstracting of articles, press clipping;
- ❑ Market its products and services through extension services; and
- ❑ Facilitate the readers through resource sharing.

<b>Acquisitions, Expenditure, Manuscripts during 2014-2015</b>		
<b>1. Acquisitions</b>		
<b>Total Net Holding (Book + Journals) as on 31 March 2015</b>		
A.	Books Purchased (2014-15 Total (129981 – 130500)	520
B.	Books Received as Gift Total (F-29975 – F-30709)	735
C.	Bound Journals Accessioned as on 31/03/2015 Acc. No. 19372	229
D.	Withdrawn Books (Lost - 18 and Weed out – 1440)	1458
<b>Total Net Holding (Books + Journals) as on 31 March 2015</b>		
<b>2. Expenditure on Books, Journals, Binding and PAC Programme</b>		<b>In ₹</b>
A.	On Books	8,18,720/-
B.	On Periodicals, Journals and Other Magazines	74,80,559/-
C.	On Stationery	1,44,854/-
D.	On Binding (Journal 474 and Books 600)	60,864/-
E.	On P.A.C. Programme	68,406/-
	<b>Total</b>	<b>85,73,403/-</b>
<b>3. Resource Generated by LDD</b>		
	• Photocopy Charges	50,129/-
	• Security Money - Institutional Membership	Nil
	• Renewal Charges – Institutional Membership	4,000/-
	• Security Money - External Membership	10,500/-
	• Recovery from Lost Books	9,236/-
	• Recovery from Overdue Charges	17,574/-
	• Recovery from Loss of Library I-Card	40/-
	• Raddi disposal cost	15,000/-
	<b>Total</b>	<b>1,06,479/-</b>

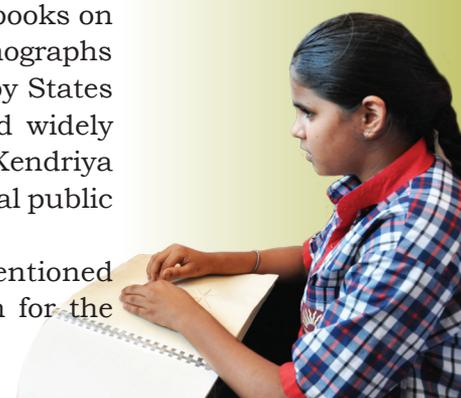


<b>4. Journals Subscribed</b>		
	• Online Journals	77
	• Foreign	134
	• Indian	43
	• Magazines	18
	• Newspapers	19
<b>5. Documentation and Information Services</b>		
<b>A. Information Products</b>		
	• Current Contents	12
	• New Arrivals on Display	11
	• Book Reviews	12
	• Press Clippings	12
	• Bibliography (Gender Studies)	01
<b>B. Photocopying Service</b>		
	• For official purpose	28,694 pages
	• On payment basis	50,129 pages
<b>6. Circulation Services</b>		
A.	Membership as on 31 March 2015	1608
B.	Membership Enrolled during 2014-15	62
	• Internal (NCERT Employees)	18
	• Special (NCERT Retired Staff)	12
	• External (Paid)	30
	• Institutional Membership (Renewal)	02
C.	Memberships Discontinued during 2014-15 (due to Superannuation or Completion of Projects)	40
	<b>Total Membership as on 31 March 2015</b>	<b>1630</b>
D.	External Readership who availed Consultation (References facility during 2014-15)	830
E.	Total number of Books Issued during 2014-15	1560
F.	Total number of Books Returned during 2014-15	2206
G.	Books issued on Inter Library Loan during 2014-15	388
H.	Books Borrowed on Inter Library Loan during 2014-15	19

## 17. PUBLICATION DIVISION

The NCERT continues with the publication of school textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports/monographs and educational journals. The NCERT textbooks are freely adopted by States under their nationalised textbooks programme. They are also used widely in schools affiliated to the Central Board of Secondary Education, Kendriya Vidyalayas, Jawahar Navodaya Vidyalayas, Tibetan schools and several public schools in all States of the country and abroad.

The NCERT granted copyright of its textbooks to the undermentioned states, based on their request, for adoption/adaptation/translation for the year 2014-15.



S. No.	State/Agency	Classes for which Copyright Given
1.	Board of Secondary and Higher Secondary Education, Alto Betim, Goa	IX – XII
2.	Himachal Pradesh Board of School Education, Dharamshala, Himachal Pradesh	VI – XII
3.	Punjab School Education Board, Mohali , Punjab	I – XI
4.	Board of Secondary Education, Assam, Guwahati	IX – X
5.	Rajasthan State Textbooks Board, Jaipur, Rajasthan	VI – XII
6.	Board of Secondary Education, Dehradun, Uttarakhand	VI – VIII (Ganit only) IX - XII
7.	SCERT, Goa, Alto Betim, Goa	I – VIII
8.	Haryana School Education Board, Bhiwani	IX – XII
9.	Jharkhand Education Project Council (JEPC), Ranchi, Jharkhand	I – VIII
10.	Elementary Education, Panchkula, Haryana	VI – VIII
11.	Bihar State Textbooks Development Corporation Ltd. Patna, Bihar	IX – XII
12.	SCERT, Thiruvananthapuram, Kerala	XI – XII
13.	Delhi Bureau of Textbook, Delhi	I – VIII
14.	SCERT, Guwahati, Assam	I – VIII
15.	The Jammu and Kashmir State Board of Education, Jammu	II – X
16.	Assam Higher Secondary Education Council, Guwahati, Assam	XI - XII

### Copyright Permission of Barkha Series

S. No.	State /UTs
1.	Goa <i>Sarva Shiksha Abhiyan</i> , SCERT Building, Alto Betim, Goa
2.	U.P. Education for All Project Board, Luknow (UP)
3.	SSA Authority, Punjab School Education Board, Mohali, Punjab
4.	Rajasthan Council of Elementary Education, Jaipur, Rajasthan

During the year under report, 469 publications were released. The details of publications are given in Appendix VI. The journals brought out during 2014-15 is as follows:

#### Quarterly Journals

- *Bhartiya Adhunik Shiksha*
- *Journal of Indian Education*
- *Prathmik Shikshak*
- *The Primary Teacher*
- *School Science*

#### Half-yearly Journal

- *Indian Educational Review*



Publication Division empanelled 505 dedicated booksellers as its wholesale agents for ensuring availability of NCERT publication across the country. The Urdu Academy, Govt. of NCT, Delhi has been appointed as distributor for NCERT's Urdu Publications. This, apart, the prompt execution of the orders received directly from schools, educational institutions and individuals for the supply of NCERT textbooks and non-textual materials were also ensured. Besides textbooks, Publication Division published several new titles under the category of 'Teacher's Guide', 'Research Monographs', 'Supplementary Reading Materials' and 'Books on Vocational Courses'. These publications were also mailed as per approved mailing list. The net receipt from the sale of the Publications was Rs 174,84,36,970.00 (approximately). In addition to the Delhi Head quarter, which is catering to the Northern India, the regional centres located at Kolkata, Bengaluru, Ahmadabad and Guwahati were catering to the need of NCERT publications of their respective regions, viz., Eastern, Southern, Western and North-East. Publication Division, has also made available books for Sales Counters at Regional Institute of Education, Ajmer, Bhubaneswar, Bhopal, Mysore and NERIE, Umiam (Shillong).

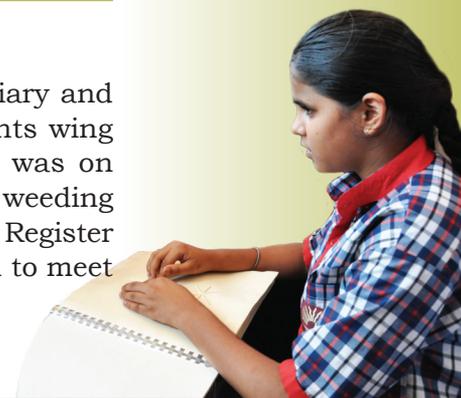
The Publication Division has also started empanelment of booksellers as its distributors exclusively for non-textual publications. The non-textual publications include supplementary reading materials, books on vocational education, research reports and monographs, etc. So far eighteen, such distributors have been empanelled.

In its endeavour to disseminate the information about the NCERT publications, the Publication Division, has organised/participated in various book fairs/exhibitions of national and international levels, as detailed below:

S.No.	Book Fair	Place	Duration
1.	A Global Education and Skill Summit-2014	Delhi	10 to 12 September 2014
2.	Delhi Book Fair	Delhi	23 to 31 August 2014
3.	World Book Fair	Delhi	14 to 22 February 2015
4.	Rajdhani Book Fair	Bhubaneswar	3 to 15 December 2014
5.	Jawaharlal Nehru National Science, Mathematics and Environmental Exhibition (JNNSMEE) for Children	Chandigarh	11 to 17 November 2014
6.	39th International Kolkata Book Fair-2015	Kolkata	28 to 8 February 2015
7.	NCERT's Foundation Day Book Fair	Delhi	1 September 2014

### GENERAL ADMINISTRATION

A dedicated team of officers and staff help to carry out all the auxiliary and secretarial functions of the Council. There is also a separate accounts wing headed by the Chief Accounts Officer. During the year, emphasis was on providing in-house training to staff, stream lining of office procedures, weeding out of old records and clearance of legal cases. In accounts, the Pension Register was computerised. The Income Tax department was also reorganised to meet the requirements of the Council.



## CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY, NEW DELHI

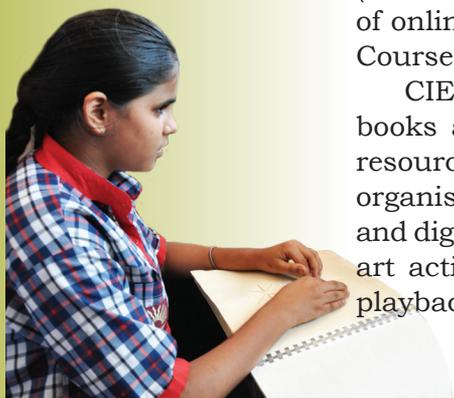
Central Institute of Educational Technology (CIET) aims to promote educational technologies viz., radio, television, satellite communications and ICT for strengthening teaching and learning. The institute undertakes activities to widen educational opportunities and promote equity and improve quality of educational processes at school level. During the year, several audio-video programmes were developed which include video lecture series for students of the +2 stage, a weekly interactive phone-in programme on issues in education for common people on *Gyan Vani*, Delhi channel, demonstrations of experiments in science, art education, coverage of important events, hindi poems and *Patron Ke Uttar*. Apart from these, talking books for the visually impaired children in Hindi, English, Political Science, History, Urdu and Sanskrit for Classes VI, VII, VIII, IX, X and XII were produced. Audio books in other subjects are also being developed and hosted at <http://ciet.nic.in>.

The institute is feeding an educational television broadcast of 30 minutes (05:00 a.m. to 05:30 a.m.) duration on National Doordarshan channel (DD-1). Educational television and radio programmes were transmitted through various channels (Gyan Darshan and 17 Gyan Vani channels). The institute has also set up a national network of institutions in the school sector using EDUSAT for organising training programmes and meetings. It provides facilities for interactive audio and video conferencing apart from broadcasting in 32 States/UTs and is connected to 100 locations across the country.

The institute undertakes research and evaluation studies to assess needs, prepare profile of target groups, monitoring of programme transmission to improve their effectiveness, design and develop materials with emphasis on development of video lectures and programmes in magazine format. In addition, the institute has the responsibility of coordinating and undertaking capacity-building of the personnel of State Institutes of Educational Technology (SIETs) across the country. The institute also undertakes training programmes for capacity-building in various aspects of educational technology viz., designing of scripts, production of educational television, radio and multimedia programmes, editing, installation and operation of studio equipments.

The institute has taken up the initiative of leveraging online platforms for outreach. Online courses, clearing houses, e-books (textbooks in e-Pub format), interactive portals and repositories of digital content have been created and will form a mainstay of CIETs efforts in reaching out to students and teachers. The institute has created ICT Curricula for the school system (students and teachers), established a National Repository of Open Educational Resources (NROER) and the proposed course platform on NROER will support a variety of online courses (short term and long term) including Massive Open Online Courses (MOOC).

CIET library has a total collection of 12,732 books, out of which 5,958 books are related to children's literature. For the best utilisation of these resources a 'Children's Corner' has been set up at CIET. The Children's Corner organises activities with neighbourhood children e.g., reading of books (print and digital), puppetry: preparation and use, expression of ideas through creative art activities i.e., drawing and painting, storytelling by NCERT faculty and playback of educational audio-visual and multimedia programmes.



The educational audio-video tape/CD library is a storehouse of 3,099 audio and 2,501 video programmes produced by CIET. The institute has created an archive of NHK Japan Prize Winning programmes. Moreover, it collaborates with several national and international organisations to share experiences, products and expertise to promote usages of educational technologies. The educational media (audio-video) programmes prepared are disseminated through exhibitions, book fairs, CIET website and through direct mailing to various stakeholders. The institute organises the All India Festival of Educational Audio-Video Programmes on a regular basis. The CIET also organises All India Contests for Students and Teachers in Photography, Videography and Poster Development on various themes to recognise and nurture creative talents.

### **PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL**

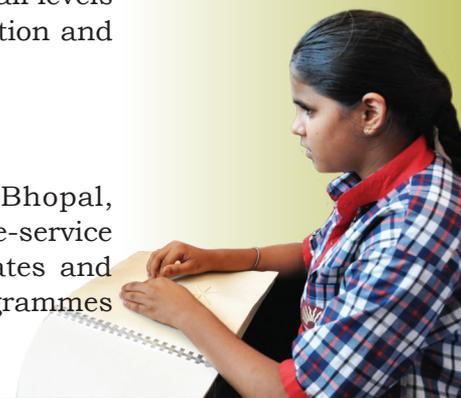
Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent unit of the NCERT, is an apex research and development institute in the field of vocational education in the country. It provides assistance to MHRD besides providing academic and technical support to a variety of vocational programmes and advises State governments and Union Territory administration on the implementation of vocational education programmes. The institute is mandated to develop curriculum and courseware for vocational subjects for Classes IX to XII in 21 sectors.

The institute is engaged in multifarious activities under broad categories viz., development, training, research and evaluation and extension activities. It provides academic and technical support for the realisation of the national goal of vocational education in fulfilling the human resource requirement for national development and the social requirements of employment. The institute works in collaboration with many national and international institutes like UNEVOC, CBSE, NIOS, NSDC, SSCs, State Boards, etc.

The vision of the institute is to develop as a world class resource organisation in vocational education. The strategies to achieve the vision are to develop competency-based modular curricula for NSQF (Levels I to IV); conduct and promote research in vocational education; devise multiple approaches to address training needs of different stakeholders; networking with national and international organisations for promotion of vocational education; popularise vocational education and establishing student support system to ensure better employment opportunities; increase the reach of PSSCIVE and establish mechanism for quality training to vocational teacher; improving access, efficiency and equity in vocational education and training at all levels of education; and collecting maintaining and disseminating information and popularise VET amongst society at large.

### **Regional Institutes of Education**

The Regional Institutes of Education (RIEs) located at Ajmer, Bhopal, Bhubaneswar, Shillong and Mysore cater to the educational needs (pre-service and in-service education) of teachers/teacher-educators in the States and UTs under their jurisdiction. Pre-service professional training programmes



are offered to prepare school teachers for teaching of various school subjects. These are Regional Resource Institutions for school and teacher education and they extend assistance for the implementation of the policies of the States/UTs and help in monitoring and evaluation of the Centrally Sponsored Schemes.

### MAJOR ACADEMIC FUNCTIONS OF RIEs

- ❑ Designing and implementing innovative pre-service teacher training programmes.
- ❑ Conducting continuing education/in-service training programmes for capacity-building of the staff of DIETs, CTEs, IASEs and SCERTs and other educational functionaries of the States/Union Territories in the region.
- ❑ Carrying out research and development activities in various areas of concern of school education and teacher education.
- ❑ Offering consultancy on matters related to school education as well as teacher education.
- ❑ Providing academic support in school education and teacher education to States and Union Territories in the region.
- ❑ Assisting in the implementation, monitoring and evaluation of centrally-sponsored schemes in the region.
- ❑ Assisting the States in the development, field testing and evaluation of curriculum materials, textbooks and instructional materials.

#### **Pre-service Teacher Education Programmes**

*One of the major concerns of NCERT is the development and operationalisation of innovative pre-service teacher education courses, viz. four-year integrated B.A. B.Ed. course in social science and humanities education, B.Sc. B.Ed./B.Sc. Ed. course in science education, two-year B.Ed. (Secondary) course in science and humanities, one-year M.Ed. course in elementary education and one-year Post-Graduate Diploma in Guidance and Counselling (PGDGC) in RIEs at Ajmer, Bhopal, Bhubaneswar and Mysore. The RIEs also have the facilities for Ph.D. programme. The main emphasis of the four-year integrated B.A. B.Ed. and B.Sc., B.Ed./B.Sc. Ed. courses is on quality, i.e., producing good teachers well-versed in content, process, pedagogy and co-curricular activities. The one-year M.Ed. (Elementary Education) course in teacher education gives adequate emphasis on issues and concerns in elementary education and research-based inputs. The pupil-teachers of the course conduct research studies in different priority areas of elementary education. The two-year B.Ed. (Secondary) course in science and humanities is an experimental course based on the guidelines of NCTE. RIE, Mysore started two courses—B.A. Ed. and B.El. Ed.; RIE, Bhopal has started B.A. B.Ed. course and RIE, Bhubaneswar started M.Phil.in Education.*

RIE, Ajmer looks after teacher education and other educational requirements for the States of Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand and the UT of Chandigarh. The institute is affiliated to Maharshi Dayanand Saraswati (M.D.S.) University,

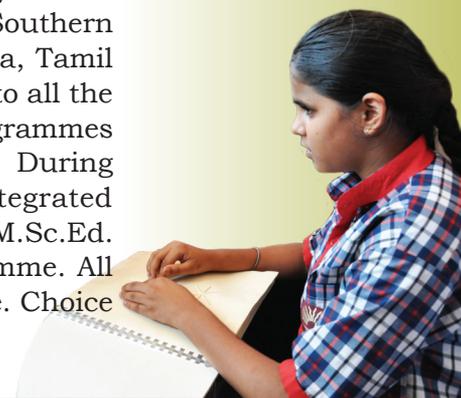


Ajmer and its courses are recognised by the NCTE, New Delhi. The institute design and tryout innovative pre-service teacher training practices through B.Sc B.Ed, B.Ed (Secondary), M.Sc.Ed. and M.Ed. (Elementary) courses. The institute is also offering Diploma Course in Guidance and Counselling, a contact-cum-distance education mode programme of NCERT.

RIE, Bhopal caters to the educational needs of the States of Chhattisgarh, Goa, Gujarat, Madhya Pradesh, Maharashtra and UTs of Dadra and Nagar Haveli and Daman and Diu. RIE, Mysore extends technical and academic support to the States of Andhra Pradesh, Karnataka, Kerala and Tamil Nadu and UTs of Lakshadweep and Puducherry. RIE, Bhubaneswar caters to the educational needs of the States of Bihar, Jharkhand, Odisha, West Bengal and the UT of Andaman and Nicobar Islands. The institute design and tryout innovative pre-service teacher training practices through four-year integrated B.Sc.B.Ed. and B.A.B.Ed. courses, two-year B.Ed. course, one-year M.Ed. course, one-year M. Phil. in Education, two-year integrated M.Sc. (Life Science). Ed. The institute is also offering Diploma Course in Guidance and Counseling, a contact-cum-distance education mode programme of NCERT.

RIE, Bhubaneswar caters to the educational needs, pre-service and in-service education of school teachers of Eastern Region including Odisha, Bihar, Jharkhand, West Bengal, Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, Tripura and Union Territory of Andaman and Nicobar Islands. The institute provides need-based training, suggesting innovative and joyful learning processes and support in terms of capacity-building. The institute is affiliated to Utkal University, Bhubaneswar, Odisha. The institute provides innovative pre-service professional education leading to B.Sc. B.Ed., B.A. B.Ed., 2-Year B.Ed. degrees in order to prepare quality school teachers for teaching science, mathematics, language and social sciences in schools. The pre-service teachers coming out of the programme are well placed as trained graduate teachers in secondary schools in different parts of the country. The institute also offers other innovative programmes such as M.Sc. (Life Science) Ed., leading to preparation of post-graduate teachers, M.Ed. to prepare teacher-educators, M.Phil. in Education to develop a research-base in teacher educators, and IDGC to develop in-service teachers for effective guidance and counselling of the secondary school students. Besides, the institute supports the states under its jurisdiction through specific research and in-service training/development programmers. The Population Education Cell (POPED Cell) regularly carries out awareness programmes, status studies, etc., on adolescent education and related areas.

RIE, Mysore focuses more on in-service teacher education programmes besides experimenting innovative pre-service teacher education programmes on experimental basis. The institute cater to the educational needs of Southern Region comprising of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, Puducherry and Lakshadweep and the PG programmes cater to all the states of the country. RIE, Mysore is currently offering pre-service programmes with the revised curriculum, approved by the University of Mysore. During the present academic year, the institute is offering four-year integrated programmes of B.Sc.Ed., B.A.Ed., six-year integrated programmes of M.Sc.Ed. in physics, chemistry and mathematics and one-year M.Ed. programme. All these academic programmes are affiliated to the University of Mysore. Choice



Based Credit System has been introduced from the year 2011-12 in these programmes. During 2014-15, forty-eight students were admitted to diploma course in guidance and counselling out of which, thirty-eight continued after the induction programme. Twenty-nine of these are deputed teachers from NVS and KVS. The institute has experimented B.Tech.Ed. for preparing teachers to work in technical schools attached to polytechnics.

North-East Regional Institute of Education (NERIE) was set up at Shillong to cater to the educational needs of North-Eastern States, viz., Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura. The institute aspires to emerge as a leader in the field of school education in the North-Eastern Region by playing the role of a pro-active organisation. The vision of the institute is to facilitate development of human resource in the region so that the States are able to provide quality inputs in all aspects of school education. Now the institute has been shifted to its new campus at Umiam (Distt. Ri-Bhoi), near Shillong. NERIE is going to start two-year regular pre-service B.Ed. programme from 2015-16 session which is duly approved by NCTE and affiliated to NEHU, Shillong. Besides B.Ed., the institute is also offering a Post Graduate Diploma in Guidance and Counselling (PGDGC).

**Course-wise Students' Enrolment in RIEs during the Session 2014-15**

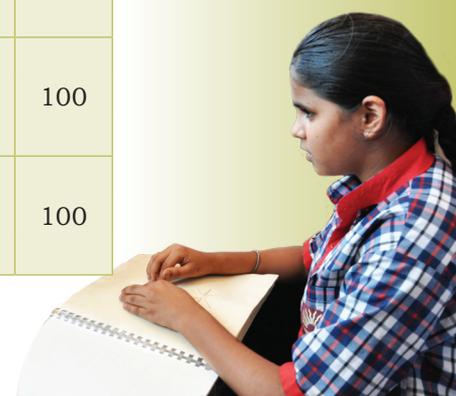
S. No.	Name of the Course	Ajmer	Bhopal	Bhubaneswar	Mysore
1.	<b>B.Sc. B.Ed.</b>				
	I Year	93	71	104	60
	II Year	89	78	102	62
	III Year	88	72	121	60
	IV Year	107	50	120	52
2.	<b>B.Ed. (Secondary)</b>				
	I Year	29	73	-	-
	II Year	22	71	-	-
3.	<b>B.A. B.Ed.</b>				
	I Year	-	38	50	40
	II Year	-	41	50	39
	III Year	-	39	49	36
	IV Year	-	29	47	38
4.	<b>M.Ed. (Ele. Edu.)</b>	28	20	32	39
5.	<b>PGDGC</b>	22	37	16	38
6.	<b>M.Sc. Ed.</b>				
	I Year	-	-	19	45
	II Year	-	-	19	42
	III Year	-	-	-	43
	IV Year	-	-	-	42
	V Year	-	-	-	28
	VI Year	-	-	-	27



7.	<b>B.Ed.</b>	-	-	-	-
	I Year	-	-	100	-
	II Year	-	-	93	-
8.	<b>M. Phil.</b>	-	-	10	-
	<b>Total</b>	<b>478</b>	<b>619</b>	<b>969</b>	<b>691</b>

**RIE Students' Performance in University Examination 2013-14**

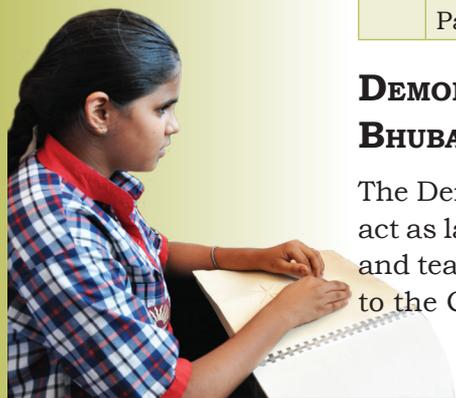
S. No.	Course	Ajmer		Bhopal		Bhubaneswar		Mysore	
		No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %
1.	<b>B.Sc.B.Ed. / B.Sc.Ed.</b>								
	<b>I Year</b>								
	Appeared	89	95.50	92	95.65	217	89.40	64	96.87
	Passed	85		88		194		62	
	<b>II Year</b>								
	Appeared	91	92.30	75	89.33	273	97.06	60	88.33
	Passed	84		67		265		53	
	<b>III Year</b>								
	Appeared	108	94.44	60	86.66	249	96.79	52	92.30
	Passed	102		52		241		48	
<b>IV Year</b>									
Appeared	109	100	113	95.57	230	99.56	60	91.66	
Passed	109		108		229		55		
2.	<b>B.Ed.</b>								
	<b>I Year</b>								
	Appeared	25	92	71	95.77	188	95.74	-	-
	Passed	23		68		180			
	<b>II Year</b>								
	Appeared	26	100	28	100	235	93.62	-	-
Passed	26		28		220				
3.	<b>B.El. Ed.</b>								
	Appeared							3	100
	Passed							3	
4.	<b>M.Ed. (Ele. Edu.)</b>								
	Appeared	30	96.66	22	95.45	56	100	23	100
	Passed	29		21		56		23	



5.	<b>MSc. Ed</b>								
	<b>I Year</b>								
	Appeared	-	-	-	-	39	100	42	100
	Passed					39		42	
	<b>II Year</b>								
	Appeared	-	-	-	-	28	100	43	97.61
	Passed					28		41	
	<b>III Year</b>								
	Appeared	-	-	-	-	-	-	42	88.09
	Passed							37	
	<b>IV Year</b>								
	Appeared	-	-	-	-	-	-	28	82.14
	Passed							23	
	<b>V Year</b>								
	Appeared	-	-	-	-	-	-	27	88.88
	Passed							24	
6.	<b>PGDGC</b>								
	Appeared	-	-	37	100	16	100	-	-
	Passed			37		16			
7.	<b>B.A. B.Ed./ B. A. Ed.</b>								
	<b>I Year</b>								
	Appeared	-	-	43	93.02	107	100	39	64.10
	Passed			40		107		25	
	<b>II Year</b>								
	Appeared	-	-	39	87.17	98	100	36	91.66
	Passed			34		98		33	
	<b>III Year</b>								
	Appeared	-	-	32	100	95	100	37	68.48
	Passed			32		95		32	
	<b>IV Year</b>								
	Appeared	-	-	35	100	100	95	39	97.43
	Passed			35		95		38	
8.	<b>M. Phil.</b>								
	Appeared	-	-	-	-	18	100	-	-
	Passed					18			

### **DEMONSTRATION MULTIPURPOSE SCHOOLS AT AJMER, BHOPAL, BHUBANESWAR AND MYSORE**

The Demonstration Multipurpose Schools are an integral part of the RIEs and act as laboratories for the trying out of innovative practices in school education and teacher education. The Demonstration Multipurpose Schools are affiliated to the Central Board of Secondary Education (CBSE), New Delhi and imparts



education from Classes I–XII through English and Hindi mediums. These are also used for practical training for the teacher-trainees of the institutes.

**Students Enrolment in Demonstration Multipurpose  
Schools for the Session 2014-15**

S.No.	Class	Ajmer	Bhopal	Bhubaneswar	Mysore
1.	I	28	66	62	70
2.	II	35	71	67	69
3.	III	35	68	65	69
4.	IV	35	71	68	70
5.	V	32	70	73	70
6.	VI	66	69	103	69
7.	VII	67	69	103	70
8.	VIII	68	69	104	69
9.	IX	64	68	103	67
10.	X	65	69	90	65
11.	XI	89	84	82	57
12.	XII	84	57	90	57
	<b>Total</b>	<b>668</b>	<b>856</b>	<b>1010</b>	<b>802</b>

**Results of Board Examination, 2014**

S. No.	Class	Ajmer		Bhopal		Bhubaneswar		Mysore	
		No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %
1.	X	63/61	96.8	65/64	98.46	89/89	100	65/65	100
2.	XII Science	26/24	92.3	32/28	87.5	64/64	100	32/32	100
3.	XII Humanities/ Social Science	29/29	100	9/8	88.8	08/08	100	25/21	85
4.	XII Commerce	31/29	93.5	32/30	93.75	18/18	100	-	-
5.	XII Vocational	-	-	3/3	100	-	-	-	-

**DEMONSTRATION MULTIPURPOSE SCHOOL, AJMER**

The DM School was set up in the year 1964 as a laboratory school of Regional College of Education, Ajmer. It is a co-educational school and follows three-language formula. It offers courses in various streams viz., science, humanities, agriculture, home science, commerce and technology. Earlier it was affiliated to Rajasthan Board of Secondary Education and was conferred with merit certificates for excellent results in public examination. Since 1977, the school is affiliated to Central Board of Secondary Education, New Delhi and prepares





*Rashtriya Ekta Diwas celebrations at RIE, Ajmer*

students for All India Secondary School Examination (Class X) and All India Senior Secondary School Examination (Classes XI and XII). Facilities exist for teaching of different subjects such as science, commerce, humanities and vocational courses. Environmental education is also introduced in all the classes. The school has separate primary wing housed in new building since August, 2005. The school library has more than 25,000 books covering different subjects and also subscribes 60 periodicals. Besides all the above, it also has well equipped science laboratories and a computer centre.

#### **Awards and Prizes won by students**

- ❑ Students of DMS bagged first position in solo dance and second position in group dance in the inter-school dance competition organised by Kala Ankur (Nriyjanjali, 2014) at Jawahar Rang Manch on 27 July 2014.
- ❑ Jigyasa Panwar of Class XII, bagged third position in the inter-school debate competition organised by Institute of Chartered Accountants of India on 8 August 2014.
- ❑ Hansika Pareek of Class IX bagged first position, Khushi Pareek of Class X (senior group) got second position and Meenakshi Meena of Class VIII bagged third position (junior group) in the inter-school sanskrit solo song competition organised by Sanskrit Bharti at Adarsh Vidhya Niketan on 7 August 2014.
- ❑ The DM school bagged first position in the inter-school group song in Sanskrit organised by Sanskrit Bharti at Samrat School on 13 August 2014.
- ❑ Urmila Chandel of Class VIII bagged first position in the solo dance competition organised by SAPTAK Sanstha held at Turning Point School, Ajmer on 9 October 2014.



*Independence Day celebrations at RIE, Ajmer*

- ❑ Simran Dhama of Class XII participated in the 41st JNNSMEE, held at Chandigarh from 11 to 17 November 2014.
- ❑ Abhishek Parihar, Bhavesh Deedwania, Kanishka Sahu, Sakshi Sharma and Sarthak Sharma of Class IX participated in national role play competition held at S.C.E.R.T., Pune on 18-19 December 2014.
- ❑ Diksha Jatiya, Jiya Nawal, Meenakshi Meena, Urmila Chandel and Vimal Sahu of Class IX participated in National folk dance competition .
- ❑ Sparsh Sahu of Class VI won the bronze medal in XIV Rajasthan state level philatelic exhibition held at Jaipur organised by Department of Posts, India.

### **DEMONSTRATION MULTIPURPOSE SCHOOL, BHOPAL**

Demonstration Multipurpose School, Bhopal affiliated to CBSE came into existence in 1965. The school admits children locally through a randomised computer draw to facilitate admission to children of all sections of society. It



*Sports Day 2014 at RIE, Bhopal*



serves as a laboratory of the Institute for carrying out action-research and innovative experiments in school education. It also provides opportunities to the interns to observe, learn and participate in teaching through internship programme. The school is affiliated to Central Board of Secondary Education. The school has separate primary wing. The school has well equipped science laboratories and a computer centre.



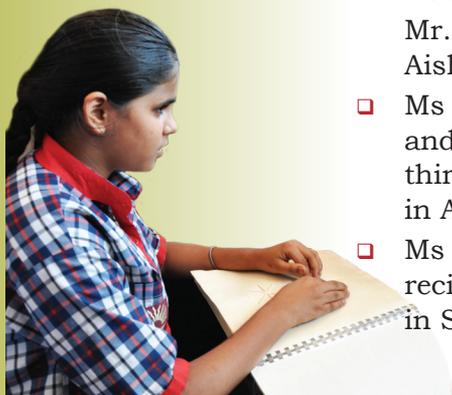
*DMS School students performing during International Women's Day Celebrations*



*Students staging a programme on Protection of Girl Child at RIE, Bhopal*

**Awards and Prizes won by the students**

- ❑ The overall result of Class X is 98.46 per cent and of Class XII is 90.78 per cent.
- ❑ Mr Ashutosh Pandey of Class X and Mr Deepankar Mandal got 9.6 CGPA and Kumud Vastri got 9.2 CGPA.
- ❑ **Science Stream**  
Master Abhishek Pandey of Class XII secured first position with 93.8 per cent marks and also received Rs 1 Lac merit prize from CBSE.  
Master Akshit Soni secured second position with 92.6 per cent marks.  
Master Udit Singh Parihar secured third position with 91.8 per cent marks.  
Hon'ble Minister of MHRD, Mrs Smriti Irani honoured Master Rajdeep Canda for scoring 97 per cent marks in English.
- ❑ **Commerce Stream**  
Ms Ayushi Kanojia secured first position with 90 per cent marks, Master Rahul Sahu secured second position with 82.60 per cent marks and Ms. Aditi Batham secured third position with 77.40 per cent marks.
- ❑ **Humanities**  
Ms Shivangi Sahu secured first position with 89.20 per cent marks, Master Rahu Sahu secured second position with 69.80 per cent marks.
- ❑ **Vocational Education**  
Mr. Vivek Kumar secured first position with 60.60 per cent marks and Ms. Aisha Rashid Secured second position with 59.60 per cent marks.
- ❑ Ms Sonal Kushwaha and Ms Kritika Choudhary of Class XII bagged first and second place, respectively and Master Saif-ur-Rehman of Class X stood third in an Inter-school Writing competition organised by PSSCIVE, Bhopal in August 2014.
- ❑ Ms Ankita Sahu of Class IX bagged first place in an inter-school poetry recitation competition organised by M.P. Rashtra Bhasha Prachar Samiti in September 2014.



- ❑ Ms Anjali Saini of Class V was honoured by the Chief Minister Shivraj Singh Chauhan in the special summer camp organised by sport and youth welfare department.
- ❑ Ms Anuma Khobragade bagged gold medal in the 5th district Karate championship organised by WFSCO at Bhopal on 29-30 July 2014.
- ❑ Abhishek Balavi of Class XII participated in the under-19 Basketball sub-junior championship. His team secured third and second place in two events at BHEL, Bhopal and Nasik, Maharashtra, respectively.
- ❑ Master Tamjeed-ur-Rehman of Class XII bagged gold medal in under-19 boys 100 metre race and Ms Garima Uikey of Class VIII stood second in under-19 girls 100 meter race in 10th CBSE cluster athletic meet.
- ❑ Mr Tamjeed-ur-Rehman of Class XII got gold medal in 400 metre race and Ms Garima Uikey got silver medal in 100 metre race in the CBSE Cluster Games held at Ratlam from 15-18 October 2014.
- ❑ The model 'Robotic Arm' developed by Tarush Garg, Adarsh Tiwari and Anurag Mishra of Class X was exhibited in the 41st Jawaharlal Nehru National Science, Mathematical and Environment Exhibition (JNNSMEE) for Children held at Chandigarh from 11-17 November 2014.

### **DEMONSTRATION MULTIPURPOSE SCHOOL, BHUBANESWAR**

The Demonstration Multipurpose School, Bhubaneswar was established in the year 1964 as a Laboratory School of the then Regional College of Education. This institution is engaged in identification, analysis, research and development, related to major areas of school education and mostly serving as a centre for training, curriculum development and researches in school education. D.M. School is an English-medium senior secondary school affiliated to Central Board of Secondary Education. It has a separate primary wing. The school has well equipped science laboratories and a computer centre.

#### ***Awards and Prizes won by the students***

- ❑ Master Manoj Kumam Khadenga took part in 41st Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for children held at Chandigarh from 11 to 17 November 2014 and displayed his exhibit 'Mobile Operated Circuit' developed by him.
- ❑ Master Swadhin Gouda of Class XII participated in State Open Badminton Championship held at Nalco, Angul from 11 to 14 September 2014 and was the under-19 boys (singles) category.
- ❑ Baishnavi Ghose of Class IV and Priyadarshini Bal of Class VI participated in State Level Painting Competition under national Campaign on Energy Conservation-2014. Ms. Bal stood first in her category.
- ❑ Suryasmita Mohanty (U-22kg) participated in sub-junior (girls) category of State Open Taekwondo Championship-2014 held at JN Indoor Stadium under the banner of Odisha Taekwondo Association, which was organised from 29 to 31 December 2014. She secured Gold Medal.
- ❑ Master Tanmay Panda of Class X secured second position in the state level essay competition under senior category held on 31 December 2014 in connection with state level celebration of Virata Divas which was organised by Information and Public Relations Dept., Govt. of Odisha.



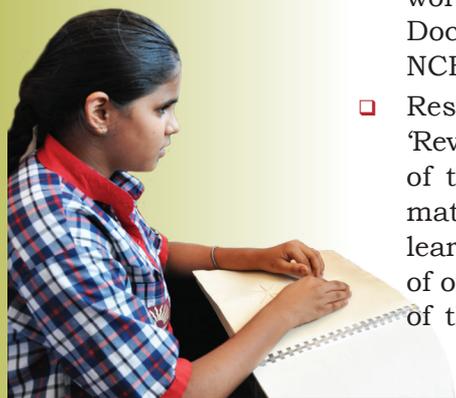
- ❑ Ms Priyadarsini Bal of Class VI won 3rd prize in the state level drawing competition held in connection with State Level Celebration of Netaji Subhas Chandra Bose and Veer Surendra Sai on 23 January 2015.
- ❑ Ms Nath Pragyan Santoshi of Class IX stood 1st in senior group debate competition at State Level during Odisha Environment Congress-2014 held at Regional Museum of Natural History, BBSR from 22 to 24 December 2014.
- ❑ Ms Vaishnavi Chauhan of Class XII got Scholarship for Higher Education from the Ministry of Science and Technology for the year 2014-15.
- ❑ Dheeraj and Nandhan of Class IX participated in district and state level cricket tournament organised by Mysore District Cricket Association
- ❑ Abhiamudhan of Class X participated in under-15 state level badminton tournament organised by Karnataka Badminton Association and was declared runner up.
- ❑ Shubha of Class IX was selected for national level cricket tournament organised by BCCI and KSCA.

### **DEMONSTRATION MULTIPURPOSE SCHOOL, MYSORE**

The Demonstration Multipurpose School, Mysore functions as a laboratory for experimentation and tryout of new strategies and instructional training programmes of the Institute. The school provides opportunities for the B.Sc.Ed. students to observe, learn and participate in teaching and serves as a centre for the cooperative training and research endeavour of the staff of the Institute. The school is affiliated to the CBSE and is known for its innovative approaches to teaching and evaluation and lay emphasis on the total development of the child's personality. Competency Based Teaching (CBT) with an action research approach has been implemented in the school with effect from 1995-96. It has a separate primary wing. The school has well equipped science laboratories and a computer centre.

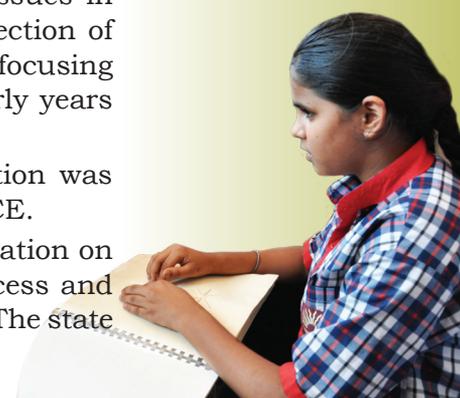
### **Major Achievements – 2014-15**

- ❑ NCERT continued to conduct research in priority areas in school education and teacher education. In addition, it also supported educational research through Educational Research and Innovations Committee (ERIC). Eight research projects were completed with the financial support of ERIC during 2014-15. NCERT started a new initiative by way of 'NCERT Doctoral Fellowships'. Ten fellowships are earmarked to be awarded every year to young aspirants to pursue doctoral research in the field of education and work on their disciplines directly related to education. In 2014-15, three Doctoral Fellows were doing Ph.D. by availing Doctoral Fellowship from NCERT.
- ❑ Research studies on 'Lateral entry students engagement with school'; 'Review of the Continuous and Comprehensive Evaluation (CCE) programme of the States and UTs'; 'Analysis of curriculum, textbooks, curricular material and capacity-building programmes of States and UTs', 'Review of learning material developed by States/UTs for age appropriate admission of out-of-school children'; 'Quality Monitoring Programme in 100 clusters of the country'; 'Assessment of social science and commerce textbooks



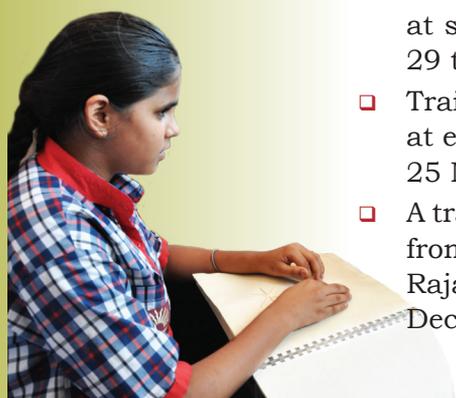
and teaching-learning resources'; 'Strategies adopted for enrolling girls in Kasturba Gandhi Balika Vidyalayas managed by different agencies'; 'Implementation of the ICT@Schools Scheme in the Kendriya Vidyalayas'; 'Comparison of classroom processes, availability and utilisation of laboratory facility for teaching-learning science and its effect on achievement in science at secondary level'; 'Impact of role-play on awareness, attitude and behaviour of adolescence'; 'Role and performance of school management and development committees', etc., were undertaken.

- ❑ The Council also continued the regular research studies viz., National Achievement Survey-Class III (Cycle-4), National Achievement Survey - Class V (Cycle-4), Subject-wise Report (Learning Gaps in Language, Mathematics and Environmental Studies (EVS) based on NAS Class V (Cycle-3) data, National Achievement Survey Class VIII (Cycle-4), Assessment of Learning Levels of Students at Secondary Stage (Class-X) under RMSA and All India School Education Survey.
- ❑ Audio-video material of 29 different activities was developed for mathematics laboratory on the concepts of mathematics at upper primary and secondary level.
- ❑ A handbook on understanding science through activities, games and art forms for upper primary and secondary stages has been developed.
- ❑ Training packages in biology, chemistry, physics at higher secondary stage, Pedagogical Content Knowledge (PCK) in mathematics, revamping of education in North-Eastern Region have been developed.
- ❑ A tool to analyse teaching-learning materials at primary level from Inclusive Education (IE) perspective, multimedia package which includes a handbook and supportive audio-video materials for managing children with autism in inclusive classroom, tactile map book in geography for students with visual impairments, and guidelines for revising pre-service teacher preparation degree programmes across India from the lens of inclusive education have been prepared.
- ❑ Material for enhancing conflict resolution skills of teachers, a multimedia module on peace education as a pedagogical tool, resource books on theme-based early childhood education programme, Early Literacy and Early School Mathematics Programme and 'Towards a green school' for elementary schools, exemplar guidelines for implementation of ECCE curriculum for children below the age of eight years, posters of stories and poems for children have been developed.
- ❑ Under Early Literacy and Early School Mathematics Programme, 'Reading for Meaning', a dossier that includes articles highlighting the issues in reading and selection of writings, *Padhne ki Dehleez Par*, a collection of articles on early literacy, *Shuruati Lekhan- Ek Samvad*, a manual focusing on the understanding of the pedagogical aspect of writing in early years and a Mathematics Learning Kit were developed.
- ❑ *Khula Aakash*: a video film of early childhood care and education was developed to sensitise the vision of National Focus Group on ECCE.
- ❑ Quality Monitoring Tools (QMT), a set of formats to collect information on various quality parameters related to school and classroom process and provide appropriate feedback for improvement has been prepared. The state

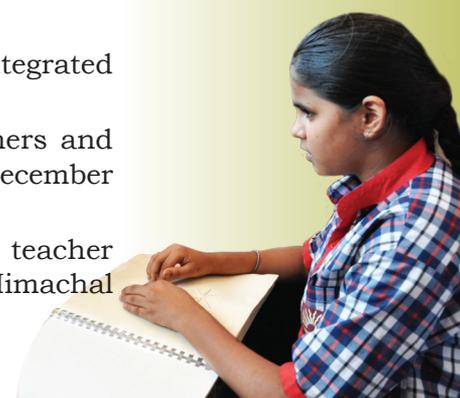


level filled in monitoring formats (STMF) and feedbacks offered by NCERT are available on QMT web portal <http://www.ciet.nic.in/QMTs/index.php>.

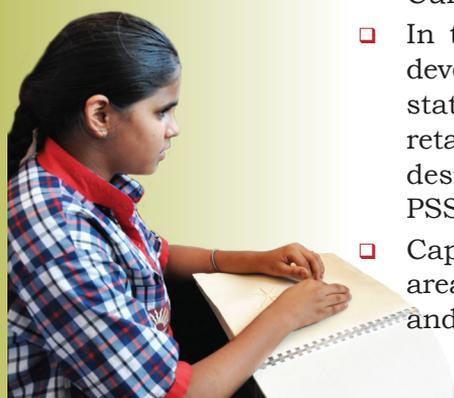
- ❑ Support material-print/ audio-video in Urdu for second language learners to promote reading and writing, syllabus and textual material for creative writing and translation in Urdu at higher secondary stage, supplementary readers on Hindi at upper primary stage, a geography kit, e-learning material in Geographical Information System, dictionaries of economics and history for schools (English-Hindi-Urdu), source book on assessment in social sciences for upper primary and secondary stages, Hindi and Urdu version of the supplementary reader on Great Thinkers of Modern India, textbooks on Health and Physical Education at secondary stage (English-Hindi-Urdu), Language education for B.Ed. programme' in Urdu and Human Ecology and Family Sciences for Classes XI and XII (Hindi Version) have also been prepared.
- ❑ Training programmes for master trainers working in SC/ST concentrated areas on activity based science teaching at upper primary stage was organised at NIE, New Delhi from 10 to 30 June 2014 and for activity-based mathematics teaching at upper primary stage was organised at NIE, New Delhi from 10 to 30 June 2014.
- ❑ A training programme for teachers working in rural areas on activity-based mathematics teaching at upper primary and secondary stage was organised at NIE, New Delhi from 23 to 27 February 2015.
- ❑ An orientation programmes for Key Resource Persons (KRPs) of States/UTs on development of Individualised Education Programme (IEP) in school subject areas was organised at NIE, New Delhi from 12 to 14 November 2014.
- ❑ Orientation programmes for master trainers for enhancing quality of education at elementary level schools was organised at NIE, New Delhi at DIET, Hooghly, West Bengal at Agartala, Tripura, Guwahati, Assam from August to December 2014.
- ❑ An orientation programme for the members of School Management Committee (SMC) on inclusion in education at elementary stage in tribal dominated states of Chhattisgarh was organised at NIE, New Delhi from 7 to 9 January 2015 and for Jharkhand State at NIE, New Delhi from 23 to 25 February 2015.
- ❑ Training of KRPs/Teachers/teacher-educators on sign language at the elementary level was organised at NERIE, Umiam (Meghalaya) from 23 February to 4 March 2015.
- ❑ A regional capacity-building workshop strengthening inclusive education at secondary stage in States/UTs was organised at NIE, New Delhi from 29 to 31 December 2014.
- ❑ Training for KRPs of NE Region on education of children with special needs at elementary level was organised at NERIE, Umiam (Shillong) from 11 to 25 March 2015.
- ❑ A training programme for KRPs on the implementation of the RTE Act, 2009 from the perspective of Children with Special Needs from Uttarakhand, Rajasthan and Gujarat was organised at NIE, New Delhi from 16 to 18 December 2014.



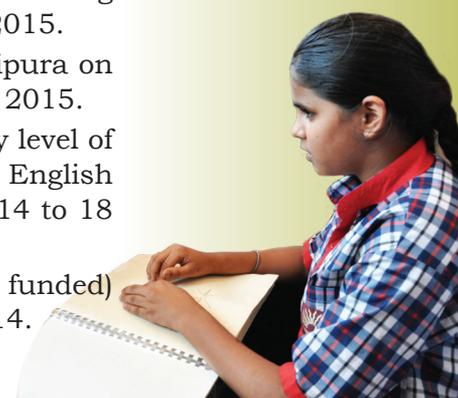
- ❑ Diploma Course in Guidance and Counselling (Distance and face-to-face) was organised at NIE, New Delhi from January 2014 to December 2015.
- ❑ A training programme for key resource persons at upper primary level in teaching of English and Social Sciences of North-Eastern Region was organised at SCERT Guwahati, Assam from 22 to 26 September 2014.
- ❑ A training programme for key resource persons at upper primary level in teaching of science and mathematics of North-Eastern Region was organised at NERIE, Umiam (Meghalaya) from 13 to 17 October 2014.
- ❑ A hands-on training programme for teachers of North-Eastern States on integration of ICT in teaching-learning of science and mathematics was organised at NIE, New Delhi from 16 to 20 March 2015.
- ❑ An orientation programme for DIET faculty of NE Region for improvement of science and mathematics education at upper primary stage was organised at NERIE, Umiam (Meghalaya) from 23 to 27 February 2015.
- ❑ A training programme on Early School Mathematics for Eastern, Western, Southern, Northern and North-Eastern Region was organised during September 2014 to January 2015
- ❑ A workshop on implementation of Quality Monitoring Tools in States was organised at NIE, New Delhi on 20-21 January 2015.
- ❑ Orientation programmes for master trainers on continuous professional development in Hindi language teaching was organised at SIE, Allahabad, U.P. from 27 to 31 January 2015 and SCERT, West Bengal from 16 to 20 March 2015, in Sanskrit language teaching was organised at SIE, Allahabad from 27 to 31 January 2015 and English language teaching was organised at NIE, New Delhi from 9 to 13 February 2015.
- ❑ Orientation programmes for master trainers in Urdu at upper primary stage was organised at NIE, New Delhi from 16 to 20 February 2015 and primary to higher secondary stage was organised at Aurangabad from 29 January to 2 February 2015.
- ❑ A refresher course on application of mathematics in economics was organised at NIE, New Delhi from 10 to 28 November 2014.
- ❑ Professional development programmes for commerce teachers at higher secondary stage was organised at Manipur University, Imphal from 6 to 11 October 2014, Dadra and Nagar Haveli from 15 to 20 December 2014 and Shiksha Sadan, RMSA, Port Blair, Andaman and Nicobar Islands from 9 to 13 February 2015.
- ❑ Interactive workshops for senior level officials and national and state resource persons in adolescence education was organised at NIE, New Delhi from April 2014 to September 2014.
- ❑ Eleven capacity-building programmes for master trainers on art integrated learning were organised from July 2014 to March 2015.
- ❑ Orientation programmes for Jawahar Navodaya Vidyalayas teachers and principals in arts education was organised at NIE, New Delhi from December 2014.
- ❑ A training programme for KGBV teachers on bridge course and teacher training package for the States of Haryana, Bihar, Rajasthan and Himachal Pradesh was organised at NIE, New Delhi in September 2014.



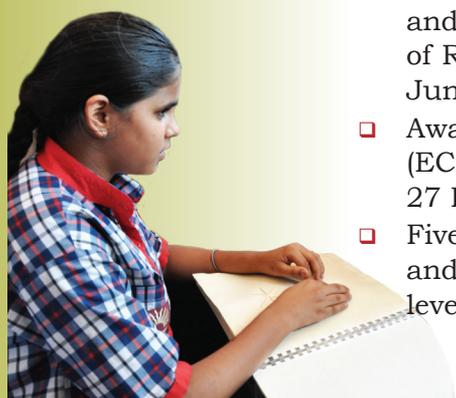
- ❑ Training programmes on gender issues in education for the principals of Jawahar Navodaya Vidyalayas of North-Eastern Region were organised at NERIE, Umiam (Meghalaya) from 29 October to 1 November 2014, for Eastern Region at RIE, Bhubaneswar from 11 to 14 November 2014 and for Southern Region at RIE, Mysore from 5 to 8 January 2015.
- ❑ An orientation for KRPs on gender equality and empowerment in NE States was organised at SCERT, Guwahati from 16 to 20 March 2015.
- ❑ A research methodology course for DIET and SCERT faculty was organised at SCERT, Bhopal from 26 to 30 August 2014.
- ❑ A capacity-building programme for elementary school teachers in conducting action research was organised at DIET, Amritsar from 7 to 10 October 2014.
- ❑ An online course on action research in education was organised at NIE, New Delhi from 16 February to 30 May 2015.
- ❑ A capacity-building programme on analysis of question papers and development of quality questions was organised at DERT, Shillong from 2 to 6 February 2015.
- ❑ A training programme for key resource persons in question paper setting and analysis of answer scripts was organised at Assam Higher Secondary Education Council, Guwahati from 23 to 27 March 2015.
- ❑ Orientation programmes for KRPs from SC, ST and minority concentrated regions of Jammu and Kashmir on examination reforms in the context of NCF-2005 and assessment was organised at Jammu and Kashmir Board of School Education, Srinagar from 16 to 20 March 2015 and for Manipur Board of Secondary Education, Imphal from 23 to 27 March 2015.
- ❑ Training of teachers on teaching of tribal/minority languages for the State of Manipur was organised at SCERT, Manipur from 30 September to 9 October 2014.
- ❑ An orientation programme for key resource persons of SCERT/SIE/RMSA on preparation and use of science and mathematics kits was organised at NIE, New Delhi in August 2014.
- ❑ Two training programmes for DIET faculty in project planning, implementation, monitoring and evaluation were organised at NIE, New Delhi from 22 to 26 September 2014 and at RIE, Bhopal from 23 to 27 February 2015.
- ❑ Training programmes on development and management of NROER were organised during May 2014 to August 2014.
- ❑ A training programme for PGTs/TGTs of Computer Science of JNVs on ICT Curriculum was organised during August 2014 to September 2014.
- ❑ In the area of vocational education, teachers training programme for developing teaching skills in classroom, workshop and laboratory for various states, teacher training programmes on latest trends and developments in retail marketing management, dairy technology, entrepreneurship, garment designing, automobile technology, banking and finance were organised by PSSCIVE, Bhopal.
- ❑ Capacity-building programmes for the KRPs belonging to SC dominated areas in teaching of life sciences, Hindi language, laboratory work in science and activity-based learning in science were also organised.



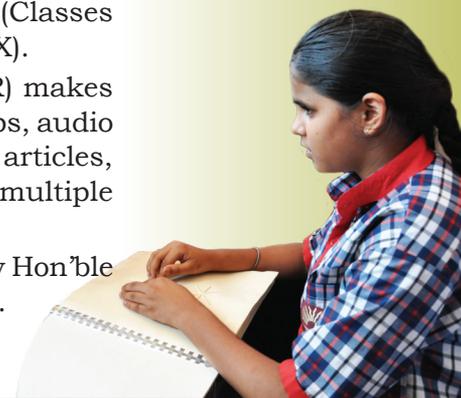
- ❑ An orientation programme on environment education for teachers teaching at elementary and secondary stages in SC dominated areas was organised at NIE, New Delhi from 26 to 28 March 2015.
- ❑ Training programmes on education for peace, teaching of Hindi, practical skills in physical sciences for teachers working in SC/ST dominated areas was organised at RIE, Bhopal.
- ❑ A professional development programme for teachers working in SC/ST dominated areas through e-learning resource material in biology at senior secondary level was organised at RIE, Bhubaneswar from August 2014 to February 2015.
- ❑ A refresher course on emerging trends in schooling for the professional development of DMS teachers was organised at RIE, Bhopal from 6 to 26 June 2014.
- ❑ A training programme for teacher-educators on curriculum development was organised at RIE, Bhopal from 9 to 12 June 2014.
- ❑ A capacity-building programme on teaching of educational psychology was organised at RIE, Bhopal from 23 to 27 June 2014.
- ❑ Capacity-building programmes for *Gyanpunj* Team (DPI, Bhopal) in english, mathematics and science were organised at RIE, Bhopal.
- ❑ A ten-day refresher course for D.M. School teachers on effective implementation of CCE and professionalism in school was organised at RIE, Bhubaneswar from 7 to 16 May 2014.
- ❑ A training programme on career guidance for the TGTs and PGTs of Navodaya Vidyalayas of Hyderabad region was organised at RIE, Mysore from 15 to 19 December 2014.
- ❑ A capacity-building programme for SCERT, DIET and school librarians to modernise the library was organised at RIE, Mysore from 19 to 23 January 2015.
- ❑ Enabling KRPs of Manipur for school visioning was organised at SCERT, Manipur from 27 February to 5 March 2015.
- ❑ Art Integrated Learning at lower primary level: A training programme for Master Trainers of the State of Assam and Meghalaya was organised at NERIE, Umiam (Meghalaya) from August 2014 to September 2014.
- ❑ Capacity-building programme on pedagogy for master trainers at upper primary level from minority institutions of the State of Meghalaya was organised at NERIE, Umiam (Meghalaya) from 23 to 27 March 2015. A training programme for principals and teachers of minority educational institutions on integration of Web 2.0 technologies in teaching and learning was organised at RIE, Bhopal from November 2014 to February 2015.
- ❑ A capacity-building programme for KRPs / master trainers of Tripura on ECCE was organised at SCERT, Agartala from 11 to 13 February 2015.
- ❑ A training programme for KRPs/ teacher-educators at elementary level of N-E states on pedagogical approaches and content enrichment in English language, EVS and mathematics was organised at SCERT from 14 to 18 July 2014.
- ❑ Revamping of Education in NER-Social Science and English (NEC funded) was organised at SCERT, Guwahati from 22 to 26 September 2014.



- ❑ A training programme on constructivist approach to teaching of social sciences at upper primary level for teacher educators was organised at SCERT, Guwahati from 16 to 20 March 2015.
- ❑ A regional workshop for reviewing and capacity-building of SSA/SCERT/DIET officials/faculty on Early Literacy Programme (under SSA) was organised at NERIE, Umiam (Meghalaya) from 16 to 20 February 2015.
- ❑ An orientation programme for Early Literacy consultants and nodal officers at RIEs was organised at NIE, New Delhi from 21 to 31 July 2015.
- ❑ An orientation programme for the principals of JNVs of the North-East region was organised at NERIE, Umiam (Meghalaya) from 16 to 18 February 2015.
- ❑ Training programme for the KRPs of Meghalaya on teaching and learning of science at upper primary level was organised at NERIE, Umiam (Meghalaya) from 17 to 21 February 2015.
- ❑ Revamping of education in NE- Improving the quality of teaching in science, mathematics, english and social science in schools-skill up gradation-cum motivation course: Training programme for KRPs at upper primary level of North-Eastern region was organised at NERIE, Umiam (Meghalaya) from 13 to 17 October 2014.
- ❑ A training programme for Block Resource Persons and Cluster Resource Persons on teaching-learning of science, mathematics and social sciences at elementary level was organised at SCERT, Agartala Tripura from 9 to 13 March 2015.
- ❑ An orientation programme on reflective teaching-learning practices among secondary level history teachers of NE-States was organised at NERIE, Umiam Umiam (Meghalaya) from 23 to 27 March 2015.
- ❑ Early childhood education programme is continued in DM Schools of NCERT with the objective to ensure sound school readiness and all-round development of the children.
- ❑ The Division of Educational Kits (DEK) makes available the following educational kits; Upper Primary Science Kit, Secondary Science Kit, Sr. Secondary Micro-scale Chemistry Laboratory Kit, Solid State Model Kit, Molecular Model Kit, Upper Primary Mathematics Kit, Secondary Mathematics Lab Kit, Secondary Science Lab Kit (Biology), Secondary Science Lab Kit, (Physics), Biology, Physics and Mathematics Kit for Higher Secondary Stage and Secondary Science Lab Kit, (Chemistry) on mass scale through empanelment of manufacturers/suppliers to various States/UTs/Schools on demand.
- ❑ All India Competition on Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions, 2013-14 was conducted and 10 schools/institutions were awarded with certificates and cash prize of Rs.20,000/- each in a national seminar held at NIE, New Delhi on 27 June 2014.
- ❑ Awareness generation programme for Early Childhood Care and Education (ECCE) were organised at Dehradun from 5 to 7 November 2014 and 24 to 27 February 2015 at New Delhi.
- ❑ Five regional workshops were organised for the academic support to States and UTs in implementing Learning Indicators and CCE at the elementary level and Teacher Performance Indicators for Teachers.



- ❑ The 20th All India Children's Educational Audio-Video Festival (AICEAVF)-2014 was organised at NIE, New Delhi from 24 to 26 March 2015.
- ❑ All India poster, photography and video contest for students and teachers was conducted on the themes: 'Clean India' and sub-themes were 'Our School, Home and Around Us', 'Public Places', 'Public Transport'. Out of 600 entries received from all over India, twenty-four were selected for awards.
- ❑ PSSCIVE, Bhopal organised an international conference on emerging trends in Technical and Vocational Education and Training (TVET) – A vision for 2025 at MPCST, Bhopal from 18 to 20 February 2015.
- ❑ A national meet on mathematics education was held at RIE, Bhopal from 21 to 23 December 2014.
- ❑ A regional meet on science education on the occasion of National Science Day was held at RIE Bhopal on 28 February 2015.
- ❑ A national seminar on *Saanjhi Shahadat aur Saajhi Virasat* was held at RIE, Bhopal on 28-29 March 2015.
- ❑ A regional seminar on current practices in guidance and counselling at the secondary schools was held at RIE, Mysore on 30 June 2014.
- ❑ A national seminar on improving learning outcomes at school level was organised at North-Eastern Council (NEC) Secretariat, Shillong, Meghalaya, from 15 to 16 October 2014 in collaboration with North-Eastern Council, Shillong.
- ❑ Three nurturance programmes for NTS awardees were organised at Indian Institute of Science and Education and Research (IISER), Mohali, Indian Institute of Science (IISc), Bangalore and Homi Bhabha Center for Science Education, Mumbai from 7 to 10 October 2014, 15 to 19 October 2014 and 3 to 7 November 2015, respectively.
- ❑ Seven hundred and eighty-six educational television programmes including lectures in various subjects at secondary and senior secondary levels, 658 audio programmes including 426 chapters of 24 audio books in daisy format have been produced to support the enhancement of teaching and learning. Major programmes of video lectures were in mathematics, biology, chemistry, history, Hindi, sociology and physics. Other programmes were 'Patron Ke Uttar', 'Art and Craft', 'Children Stories', 'Chemistry laboratory experiments', 'Math Activities' and coverage of important events. It also includes educational activities held at NCERT and outside NCERT.
- ❑ Major programmes of audio series were *Aao Quiz Karein*, English (Classes VI and X), economics (Classes IX and X), history (Classes IX and X), Hindi (Classes VI, VII, VIII, X and XII), political science (Class X), history (Classes VIII and IX), Sanskrit (Classes VI, VII and VIII) and Urdu (Class IX).
- ❑ The National Repository of Open Educational Resources (NROER) makes available digital resources such as educational videos, concept maps, audio clips, interactive objects, photographs, diagrams, charts, images, articles, learning objects, talking books, textbook pages and documents in multiple languages for teachers and students.
- ❑ National ICT Awards-2013 was awarded to nine selected teachers by Hon'ble President of India, Shri Pranab Mukherjee, on 5 September 2013.



- ❑ Project Progress Review Meeting for Adolescence Education Programme (AEP) was held at NIE, New Delhi on 3-4 December 2014. Project Progress Review Meeting for National Population Education Project (NPEP) was organised at Amritsar, Punjab from 15-16 February 2015.
- ❑ A national role play competition was organised for Class IX students of government schools of States/UTs of Northern, Eastern and North-Eastern Regions at NIE, New Delhi on 8-9 and 11-12 December 2014 and for Southern and Western Regions at MSCERT, Pune, Maharashtra on 15-16 and 18-19 December 2014.
- ❑ The 41st Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for children was organised at Chandigarh from 11 to 17 November 2014.
- ❑ A two-day conference of Directors of SCERTs/SIEs was organised at NIE, New Delhi on 2 to 3 March 2015.
- ❑ National workshops on language pedagogy were organised from 10 to 14 November, 2014 and 16 to 20 March 2015 at NIE, New Delhi.
- ❑ A national conference on language and inclusive education was organised at NIE, New Delhi from 10 to 12 March 2015.
- ❑ One thousand forty-four students were selected for the NTS award for the year 2014.
- ❑ A consultative meet for need assessment for promoting culture of educational research through interaction with state and district level bodies was organised at NERIE, Umiam (Meghalaya) from 10 to 12 March 2015.
- ❑ NCERT continued with the publication of school textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports/monographs and educational journals viz., Journal of Indian Education, School Science, The Primary Teacher, Prathmik Shikshak, Bharatiya Adhunik Shiksha and Indian Educational Review.
- ❑ The Council also published *Vedparijat*, an introductory book on vedic literature, *Vatayanam*, a audio of Sanskrit stories, *Vatayanam*, a video of Sanskrit stories and *Chhandovilasah*, a video of Sanskrit *Chhandas*.
- ❑ NCERT textbooks are freely adopted by states under their nationalised textbooks programme. They are also used widely in schools affiliated to the CBSE, KVS, NVS, Tibetan Schools and several public schools in all the states. Many states have obtained copyright for NCERT textbooks.
- ❑ During the year under report, 469 publications were released. The distribution of the NCERT textbooks was undertaken through a network of over 505 wholesale agents all over India. The Urdu publications were distributed/sold through Urdu Academy, Government of NCT of Delhi.





## 2. Major Publications

### DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

#### ***Laboratory Manual in Science at the Upper Primary Stage***

(ISBN 978-93-5007-283-7)

The laboratory manual in science for the upper primary stage is complementary to the science textbooks for Classes VI-VIII. It aims at enhancing children's comprehension of scientific concepts and also acquiring basic experimental skills. Based on the science curriculum of upper primary stage, fifty-eight key activities have been given in this manual. Teachers can adapt or adopt these activities for facilitating teaching-learning process.

#### ***Laboratory Manual in Physics for Classes XI and XII (in Hindi)***

(ISBN 978-93-5007-279-0) – Class XI

(ISBN 978-93-5007-279-5) – Class XII

The Hindi versions of Laboratory Manual in Physics for Classes XI and XII have been published. These complement the physics textbooks of Classes XI and XII. The manuals aim to help students in performing laboratory-based experiments, activities, projects and demonstrations that will help in nurturing the spirit of curiosity and enquiry in the students.

### DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

#### ***Including Children with Special Needs: Primary Stage***

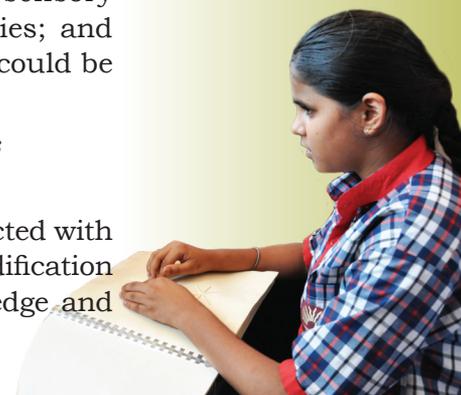
(ISBN 978-93-5007-284-4)

The handbook Including Children with Special Needs: Primary Stage provides exemplary guidelines for meeting the special needs of children in an inclusive classroom. The handbook is the result of numerous interactions with the stakeholders and it depicts realistic examples from the grassroots. It is organised in two main sections: i) suggestions, tips and strategies for inclusive classrooms which have students with specific needs related to sensory disabilities, physical disabilities and cognitive/intellectual disabilities; and ii) understanding about CCE and offers a few suggestions on how it could be utilised for an inclusive classroom.

#### ***Teachers Creating Inclusive Classrooms: Issues and Challenges***

(ISBN 978-93-5007-292-9)

The book was published based on the results of research study conducted with the objectives to identify current practices of curricular adaptation/modification in inclusive schools for identifying the gaps between current knowledge and

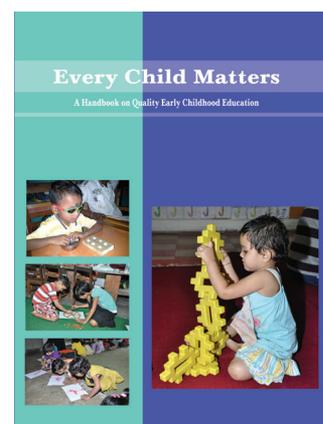


skills of the teachers, and what they need to know to teach children in inclusive classrooms. The data were collected with the help of the research tool viz.. teachers open-ended questionnaire from 174 regular school teachers and 20 resource teachers, 63 CWSN and 77 parents from seven states. The study results show that majority of CWSN were interested in coming to schools but the teachers faced a number of difficulties in meeting the needs of the children. The study indicates the need for quality training programmes for teachers in adapting the curriculum in the class, good infrastructural facilities and support services and better acceptance of CWSN by teachers and other students. It also brought to light the poor collaboration between special teachers, teachers and parents.

## **DEPARTMENT OF ELEMENTARY EDUCATION (DEE)**

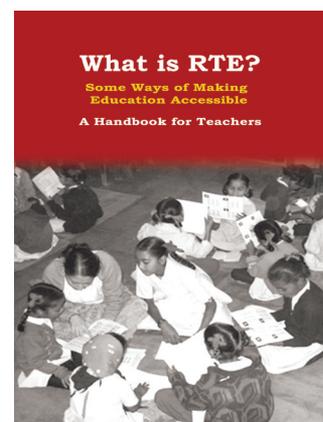
### ***Every Child Matters – A Handbook on Quality Early Childhood Education*** (ISBN 978-93-5007-287-5)

The handbook is for the practitioners, teacher-educators, and other stakeholders working in the area of ECCE. It has been developed to meet the growing public demand to suggest the content and methods for organising quality pre-school education. It is expected to help all those who work with young children in different roles. The handbook contains six chapters giving entire information about the need and significance of ECE, organising quality ECE programme and action research. The text is supplemented with pictures and illustrations for better understanding. It also provides activities for children for the development of different domains. There are six annexures having valuable information for the practitioners and managers of ECE. All the activities given in the handbook were field tested to ensure their feasibility and relevance.



### ***What is RTE? – A Handbook for Teachers*** (ISBN 978-93-5007-276-9)

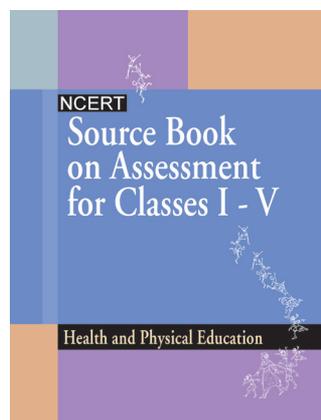
This resource book has been developed with the objective of creating awareness among teachers and to equip them with necessary knowledge, skills and attitudes for effective implementation of the RTE Act. It would help the teachers to understand the spirit of the Act and issues arising out of various clauses/sections of the Act as well as their role in the implementation of the Act. The resource book has six modules, viz., Understanding the RTE Act; Creating school environment free from fear, trauma and anxiety; Creating a learner-centered classroom; Assessment for development and learning; Managing the schools and Preparing children for age-appropriate classes.



### **Source Book on Assessment for Classes I-V: Health and Physical Education**

(ISBN 978-93-5007-286-8)

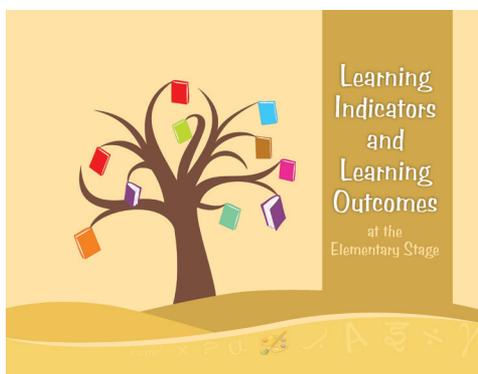
The source book for the primary stage makes an attempt to address a variety of concerns and issues pertaining to learning assessment in the area of health and physical education in order to provide quality education. The document has six chapters, chapter one is generic in nature which is common in all the source books. Chapter two provides status and practices of Health and Physical Education in classrooms. Chapter three provides inputs that can make teaching-learning meaningful. Chapter four and five provide suggestive activities for Classes I-II and III-V, respectively. The last chapter provides critical review on recording and reporting procedures along with suggestive format and guidelines for reporting in this area.



### **Learning Indicators and Learning Outcomes at the Elementary Stage**

(ISBN 978-93-5007-303-2)

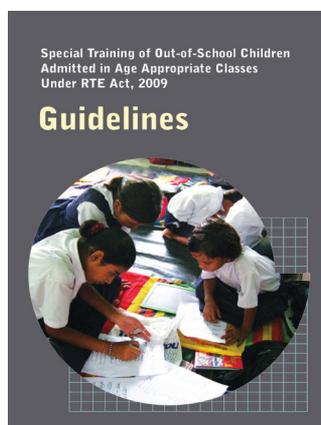
Improving learning levels of children is one of the priority agenda of RTE, SSA and Education for All (EFA). In order to improve the learning levels of children at the elementary stage, stage-wise (III, V and VIII) curricular expectations and class-wise learning indicators in all the areas namely, English, Hindi, Urdu, mathematics, environmental studies, science, social sciences and arts education have been developed. The document provides the nature and approach to each curricular area as envisaged in *NCF-2005*. It provides pedagogical processes along with learning indicators so that process of learning may be clarified in context of child's learning. It also provides guidelines for users at the end of each curricular area.



### **Special Training of Out-of-School Children Admitted in Age Appropriate Classes under RTE Act, 2009 - Guidelines**

(ISBN 978-93-5007-296-7)

As per RTE Act, 2009, a child above six years of age who has not been admitted in any school or could not complete his or her elementary education is required to be admitted in an age appropriate class and to be at par with other children she/he has a right to receive special training. However, organising special training remains to be a challenging task. Therefore, realising the need for effective planning and implementation of special training, the guidelines titled 'Special Training of Out-of-School Children Admitted in Age

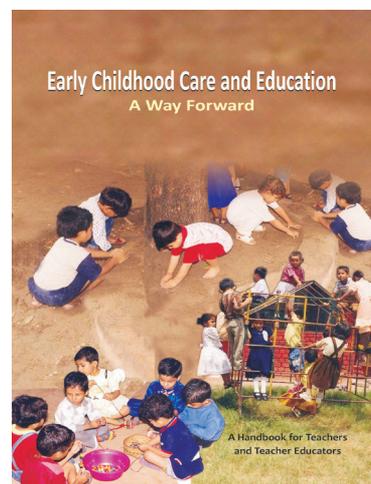


Appropriate Classes under RTE Act, 2009 – Guidelines (2015)' have been brought out. This document deals with important issues and concerns with regard to the implementation of 'Special Training', which may be useful for policy implementers, teacher-educators as well as head teachers or teachers who are directly involved in the teaching-learning and special training activity.

***Early Childhood Care and Education, A Way Forward – A Handbook for Teachers and Teacher Educators (2015).***

(ISBN 978-93-5007-264-6)

ECCE having the components of stimulation, pre-school education, nutrition and health care for children less than eight years plays a crucial role in all-round development of a child and her/his future learning. This handbook suggests various measures to improve the quality of pre-school education in the country. It highlights the need and significance of ECCE, curriculum, methods for pre-school education and discusses on various issues related to coverage and quality of ECCE with a perspective for future. It has been developed especially for the teachers and teacher-educators. It intends to help stakeholders to bring about necessary changes in the system by making learning of children natural, enjoyable and developmentally appropriate.



**DIVISION OF EDUCATIONAL RESEARCH**

***Basics in Education: Textbook for B.Ed. Course. New Delhi: NCERT***

(ISBN 978-93-5007-283-7)

The textbook for B.Ed. course has been developed as per the new curriculum of two-year B.Ed. programme introduced by NCERT. Written by scholars in the field of education, it includes eleven chapters: Concept and meaning of education, Goals of education, Processes and modes of education; Knowledge: meaning and facets, Process of knowing, Organisation of knowledge in schools, Teacher autonomy and accountability, Learner autonomy, Values: Concepts and context, Education and values and Values in the emerging social context. The textbook has been written in a self-instructional format which provides opportunities to the student-teachers for engaging in the process of inquiry, critical analysis and intellectual discourse. Additionally, each chapter contains learning checks, activities, review questions, references/further readings, which enables the student-teachers to engage with those concepts. This is an essential reading material for all B.Ed. students in the country.

**PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL**

The PSSCIVE has developed and printed curricula for Class IX to XII (level 1-4) for the following sectors during the year 2014-15:

Sector and Area	Curriculum and Courseware for Class IX to XII (level 1-4)
<b>Health Sector</b>	Diabetes Educator, Ophthalmic Assistant, Speech and Audio Therapy Assistant, Cardiac Care Technician. Medical Lab Technician, Blood Bank Technician and Histotechnician.
<b>Hospitality</b>	House Keeping Attendant and House Keeping Supervisor
<b>BFSI</b>	Business Correspondent, Mutual Fund Agent, Small and Medium Enterprise Assistant and Loan Approval Assistant
<b>Travel and Tourism</b>	Transfer Assistant, Tour Assistant and Travel Agency Assistant
<b>Manufacturing Technology and Building Construction</b>	Mechanic, Car Washer, Auto Electrician, Carpenter, Turner, Machinist, Welder, Fitter, Sheet Metal Worker, Forger, Mason, Plumber and Painter
<b>Security</b>	Unarmed Security Guard
<b>Media and Entertainment</b>	Animator, Rigging Artist, Texturing Artist and Vision Technician
<b>Telecom</b>	Field Sales Executive and Distributor Sales Executive
<b>IT/ITeS</b>	IT Service Desk Attendant, Domestic Biometric Data Operator, Domestic IT Helpdesk Attendant, Computer Assembler, Computer Test and Repair Technician, Home Electric Technician, TV Repair Technician and Domestic Appliances Technician
<b>Textile</b>	Apparel Production Assistant and Assistant Fashion Designer (Apparel)
<b>Logistics</b>	Transport Assistant and Warehouse Assistant
<b>Agriculture Sector</b>	Solanaceous Crop Cultivator, Bulb Crop Cultivator, Tuber Crop Cultivator, Protected Cultivation, Floriculturist (Open Cultivation) Gardener – Landscape and Gardening, Poultry, Paddy Farmer, Sugarcane Cultivator, Micro Irrigation Technician, Dairy Worker and Hatchery Production Worker
<b>Retail Sector</b>	Retail Bagger, Store Operations Assistant, Cashier, Retail Merchandiser, Customer Service Associate, Trainee Associate and Sales Associate

## JOURNALS AND REPORTS PUBLISHED DURING 2014-15

### *Journal of Indian Education (JIE) and Bhartiya Adhunik Shiksha (BAS)*

The Journal of Indian Education (JIE) and Bhartiya Adhunik Shiksha (BAS) are quarterly journals published regularly by NCERT. The purpose is to provide a forum for teachers, teacher-educators, researchers and others concerned with education to encourage original and critical thinking in education through presentation



of new ideas, critical appraisal of contemporary educational problems and experiences on innovative practices. The contents include thought provoking articles, research papers, challenging discussions, innovative practices and experiments, field experiences, book reviews and so on.

During 2014-15, 105 articles in English and 90 articles in Hindi were received for publication in the respective journals. After reviewing articles and papers, four issues of JIE i.e., May 2014, August 2014, November 2014 and February 2015 and four issues of BAS i.e., April 2014, July 2014, October 2014 and January 2015 were finalised and sent for publication.

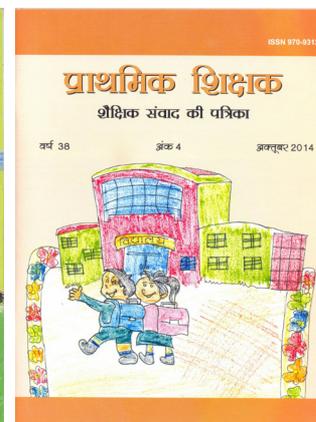
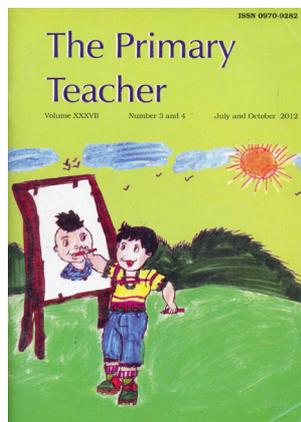
**Indian Educational Review**

Indian Educational Review, a half-yearly journal aims to enhance the theory and practice of research in education. It is a journal of opinion and research in the field of education. Contributions in the journal include all kinds of empirical research in education, whether sociological, psychological, economic or organisational. The journal covers wide range, including interdisciplinary studies. The purpose of this journal is to provide a medium for dissemination of educational research and exchange of experiences among research workers, scholars, teacher-educators, teachers and others interested in educational research and related fields and professions. Two issues of July 2013 and January 2014 were brought out during the year 2014-15.



**Primary Teacher and Prathmik Shikshak**

The journals 'The Primary Teacher', in English and 'Prathmik Shikshak', in Hindi provide a forum to teachers for sharing their views, experiences and ideas. This helps in disseminating knowledge and innovative practices to promote Universalisation of Elementary Education and implementation of the RTE Act. The January and April (combined issue) 2014, July 2014 and October 2014 issues of the Primary Teacher have been published and January 2015 issue is under publication. The April 2014, July 2014 and October 2014 issues of Prathmik Shikshak have been published and January 2015 issue is under publication.



**School Science**

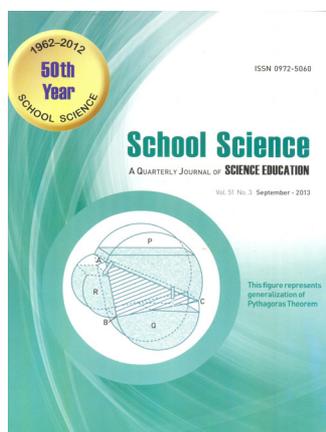
School Science a quarterly journal published by NCERT provides a forum to teachers, teacher-educators, administrators, researchers and students to



disseminate their views, experiences and innovations in the field of science and mathematics education at school level. It also disseminates new ideas and latest global trends in the areas of science and mathematics at school level and other related educational aspects. The issues of March 2014, June 2014, September 2014 and December 2014 to March 2015 contain general as well as research articles from various disciplines of science and mathematics along with the regular features like 'Science News', 'Web Watch' and 'You've Asked' and is under publication.

#### **Annual Report 2013-14**

The Annual Report for the year 2013-14 has been published. It contains detailed account of activities undertaken by various constituents of NCERT in the area of school and teacher-education. A variety of programmes pertaining to research, development of learning materials, in-service training and extension were carried out towards improving the educational scenario of the country. This will provide a feed-in to educational planners, scholars and other educationists dealing with school education.



# Annual Report 2014-2015



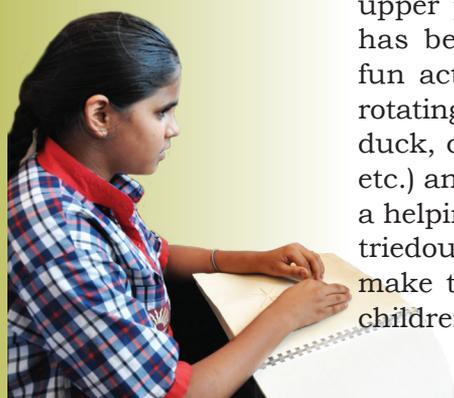
### 3. Development Activities

#### **Audio-Visual Material for Mathematics Laboratory**

Audio-video material of 29 different activities was developed for mathematics laboratory on the concepts of mathematics at upper primary and secondary level. The video collection includes, algebraic identity  $(a + b)^2 - (a - b)^2 = 4ab$ , sum of the exterior angles of a polygon, total surface area of a sphere, pattern between number of lines and maximum number of intersection points, Degree Measure Theorem, visual representation of an algebraic identity  $a^3 - b^3$ , Euler's formula, sum of the interior angles of a polygon, visual representation of theorem, the vertically opposite angles formed by pair of intersecting lines are equal, different kinds of angles when two lines are intersected by a transversal, sum of the opposite angles of cyclic quadrilateral is  $180^\circ$ , cubic algebraic identity  $(a + b)^3$ , Basic Proportionality Theorem (Thales theorem), Pythagoras Theorem, area of a trapezium, algebraic identity  $a^2 - b^2$ , relationship between the areas of similar triangles and their corresponding sides, form various three dimensional (3-D) objects from two dimensional (2-D) nets, total surface area of a right circular cone, LCM and HCF of given numbers, volume and surface area of a frustum of a cone, construction of a square root spiral and locating some of the irrational numbers on a number line, volume of combination of solids, various types of angles, ratio among the volumes of a right circular cone, a hemisphere and a right circular cylinder, explore various geometrical figures using paper folding, total surface area of combination of some solids and mathematics in and around us.

#### **Handbook on Understanding Science through Activities, Games and Art Forms**

Learning science can be made more children-friendly, interesting and understandable with the help of educational games, toys and fun activities. In view of this, material for upper primary and secondary stages has been developed which contains fun activities (balloon rocket, who is rotating the bottle, etc.), toys (intelligent duck, climbing joker, *sona ki pasand*, etc.) and games ('science bola', 'extend a helping hand', 'east or west, home is the best', etc.). The material has been tried out with teachers and students. Through this material, the teacher can make the teaching more interesting and enjoyable. This will be helpful for children in learning the concepts easily.



***Training Package in Biology at the Higher Secondary Stage***

A training package in biology at higher secondary stage has been developed on the basis of findings of the study of biology curriculum at higher secondary stage and the feedback obtained from the teachers as well as the field experiences. The package includes various pedagogical aspects of transaction of biology concepts, methods of evaluation and laboratory techniques. This will be useful for organising further training programmes by NCERT and the state authorities.

***Training Package in Chemistry at the Higher Secondary Stage***

A training package in chemistry has been developed in order to support teachers for designing effective teaching-learning strategies. The package has been triedout with practicing teachers. This package can be used as a guideline for organising training programmes for the professional development of teachers.

***Training Package in Physics at the Higher Secondary Stage***

A training package in physics has been developed based on teachers' feedback and field experiences. The developed material has been triedout with practicing teachers. The package, which includes seventeen modules, discusses strategies of transacting the identified difficult concepts with intertwined assessment. The package can be used by States and UTs while conducting professional development programmes for teachers.

***Pilot Testing of Certificate Programme for Teaching of Elementary Science***

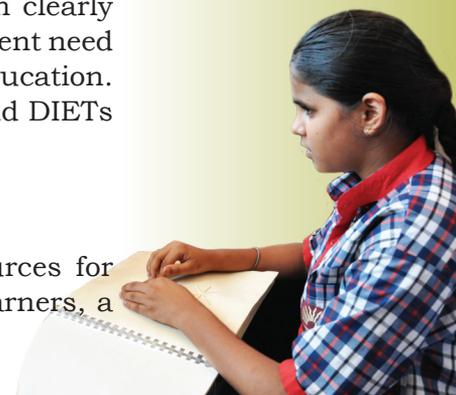
'Certificate Programme for Teaching of Elementary Science (CTES)' for pre-service and in-service elementary science teachers is proposed to be launched through online mode. This is meant to provide open and flexible self-learning opportunities for teachers through online interactive e-learning contents. Textual materials have been developed. Software based auto assessment questions have been generated. The designed modules in the form of 'story-board' have to be converted into web pages to be delivered through an appropriate learning management system. The package will be useful for the teachers in self-learning of the scientific concepts and help them improve in their own teaching strategies.

***Assessment of Status of D.El.Ed. Syllabus in the Context of Environmental Education***

The status of D.El.Ed. syllabus was assessed in the context of environmental education. The meeting was attended by 26 representatives from DIETs located in 25 States and UTs. Preliminary analysis of the feedback received from the participants revealed that though some areas of environment education has been reflected in the syllabus, there are areas which have not been clearly mentioned in the syllabus. Besides, almost all participants felt the urgent need for orientation/training of DIET faculty in the area of environment education. The syllabus after its finalisation will be disseminated to SCERTs and DIETs for running the D.El.Ed course in their respective institutions.

***Tool to Analyse Teaching Learning Materials at Primary Level from Inclusive Education (IE) Perspective***

Considering the need to critically analyse teaching-learning resources for facilitating the creation of enabling learning environments for all learners, a



tool with specific reference to gender socially disadvantaged and economically weaker sections and children with disability has been developed. A team of teacher-educators, research scholars and Kendriya Vidyalaya teachers have been part of developing the tool. The team was collectively engaged in delineating the key principles which helps to develop an in-depth understanding of the focus areas of the tool. It also includes case studies which raise issues related to gender, disability and socially disadvantaged groups and economically weaker sections. The tool is validated by analysing teaching-learning materials of Hindi, English, EVS and Mathematics at the primary level and is being revalidated through various intensive workshops. An important outcome for the teachers has been the understanding of inclusive pedagogical processes in the classrooms at the primary level. The tool will help policy makers, textbook development bureau and other stakeholders to promote inclusion and keep the focus on the needs of all children.

***Multimedia Package for Managing Children with Autism in Inclusive Classroom***

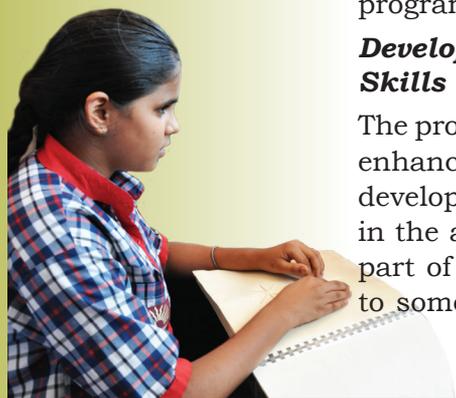
The multimedia package includes a handbook and supportive audio-video materials. The handbook addresses the needs of children with autism in regular classrooms to help the teachers and parents deal with these children. The package was tried out among 50 children with autism studying in 24 different Kendriya Vidyalayas located in Delhi and NCR. It was also shared with the teachers of these schools and their inputs were incorporated before finalisation. The multimedia package will be beneficial for the teachers to teach an inclusive classroom where children with autism are learning with the regular students.

***Guidelines for Revising Pre-service Teacher Preparation Degree Programmes across India from the Lens of Inclusive Education***

Teacher preparation is a vital component of systemic reforms towards inclusive practices. A wide variety of pre-service teacher training degree programmes are being offered by universities to prepare teachers. These include B.Ed. (one-year) and B.Ed. (two-year), B.Ed (Special) with further specialisations in VI, HI, MR, Autism, LD, etc., B.Sc. B.Ed., B.Com. B.Ed., B.A.B.Ed. and M.A. B.Ed. These courses are running in annual and semester modes in regular and distance forms. Guidelines for revising the pre-service teacher preparation programmes running across India from the lens of inclusive education were developed. The guidelines offer suggestions for making theory as well as practical component for pre-service teacher preparation degree programmes inclusive keeping in mind the latest directives from NCTE. The guidelines will be useful for various universities for developing their own pre-service degree programmes by including the components of inclusive education.

***Developing Package for Enhancing Conflict Resolution Skills of Teachers***

The programme was taken up with the objective of developing video material for enhancing awareness of teachers about conflict resolution skills. The scripts developed for video recording were finalised with the help of experts working in the area of conflict resolution. The video depicts how conflict is a normal part of our lives. Everywhere at home or in offices, people are stressed due to some unresolved conflicts. The video presents a scene in school where a



teacher and the principal are involved in task assignment conflict. There is an alternate scenario in which principal and teacher are seen to exhibit skills of conflict resolution. The package will be useful for teachers in understanding the psychological need of the students and improve the skills of teachers which would help them in resolving the conflicts among the students.

***Development of a Multimedia Module on Peace Education as a Pedagogical Tool***

Three videos were recorded for dissemination through Gyan Darshan depicting pedagogy of peace embedded in the transaction of subject content. One video contained a language teacher teaching an English poem 'On the face of it' to Class XII students, in the second video teacher is teaching a lesson 'Ek Kutta aur Ek Maina' to Class XI students. The third video contained poem 'Father to son' being taught to Class IX students. The videos highlight warm interaction and dialoguing skills of the teachers and focuses on relating content to the lives of students. The multimedia module will be useful for the teachers while teaching different subjects to impart the peace education also.

***Translation of Self-learning Modules for Diploma Course in Guidance and Counseling in Hindi***

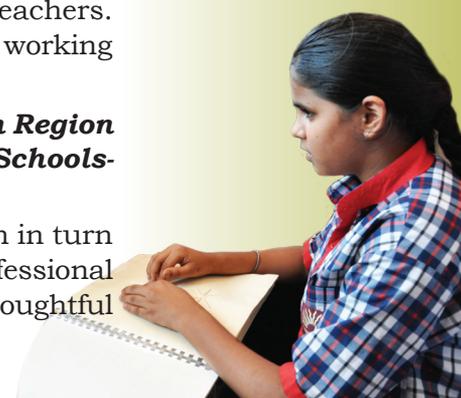
The aim of the project was to make available course package in Hindi for participants of the diploma course from Hindi speaking states. Six modules, namely, Guidance in Action, Special Concerns in Counselling, Developing Mental Health and Coping Skills, Career Development-II, Career Information in Guidance and Counselling-II and Assessment and Appraisal in Guidance and Counselling-II were translated in Hindi.

***Development of a Training Package for Teacher Educators at the Elementary Level on Pedagogical Content Knowledge (PCK) in Mathematics***

NCF-2005 highlights the importance of mathematics and stated that the main goal of mathematics education is nothing but the mathematisation of the child's thought processes. The National Achievement Survey of NCERT clearly brings out the declining trend in learning of mathematics over the years. The same is the case with board examination results in mathematics of different state and central boards in India. A number of factors may influence the learning of mathematics but teachers play an important role in the performance in mathematics, particularly Pedagogical Content Knowledge (PCK) of the mathematics teacher. Hence, the teacher-educators who prepare the teachers need to be given orientation in the area of PCK in mathematics which has to start from the elementary level itself. Keeping this in view, a training package on PCK for teacher-educators at elementary level is being developed. The themes for the package have been identified based on the needs of teachers. The package will be used for providing orientation to teacher-educators working in different DIETs.

***Training Packages for Revamping of Education in North-Eastern Region – Improving the Quality of Teaching in Science, Mathematics in Schools-Skill Upgradation-cum-Motivation Course***

Quality of education depends mainly on the quality of teachers, which in turn largely depends on the quality of their professional preparation and professional development. Although the recent curriculum reform efforts envision thoughtful



and challenging instruction, most of the instructional practices are traditional in nature. The schools follow lecture method with formal recitation as the common teaching strategy. Schools in the NER face a variety of challenges in meeting the needs of an increasingly diverse student population. Many teachers are still untrained or less qualified, and not fully equipped to make students succeed in learning. Realising the importance of professional development of teachers, the North-Eastern Council (NEC) through North-Eastern Regional Education Committee (NEREC) has initiated steps to organise training programmes for teachers at all stages of school education. This would help teachers to acquire/update content and pedagogical competence and gain insights into curriculum reforms and their implications to classroom practices. In this connection, on the request of NEC, Shillong to provide training to teachers in the NE states, NCERT developed and published training packages for primary and upper primary teachers to reduce the variation in the quality of the training in terms of coverage of the content and its transactional methodology. The package for primary teachers includes modules related to mathematics, environmental studies and English language, as teachers at this stage of school education are required to teach invariably all these subjects. The training package for upper primary teachers includes modules related to science, mathematics, social sciences and English language. This package will be useful in organising training programmes by educational authorities for the teachers of the North-East.

***Theme Based Early Childhood Education Programme – A Resource Book***

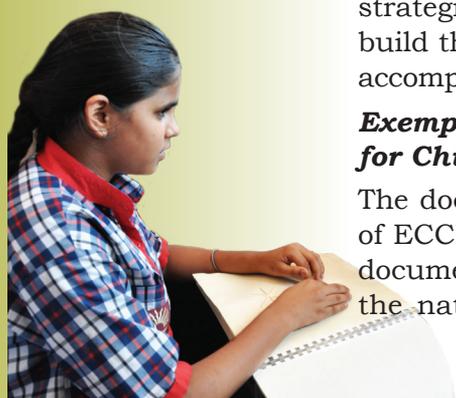
The resource book will help and guide practitioners, teacher-educators in early childhood education to plan and develop age and developmentally appropriate activities based on different themes at pre-school and early primary level. The resource book also suggests how to observe the progression of young children's learning. The primary teachers will utilise the resource book for running the ECCE programme.

***Resource Book for Elementary Schools – Towards a Green School***

A resource book for elementary schools towards a green school has been developed and finalised after incorporating the suggestions received from the stakeholders from SCERTs, SPOs of different States and UTs and from other organisations under Ministry of Environment and Forests (MoEF) across the country. The resource book aims at enabling different stakeholders to analyse, reflect, evolve and use strategies/practices for environmental sustainability in the schools. It is expected to be useful for the teachers, principals and other administrators to make them aware, sensitise and equip them with various strategies, enable them to offer students a number of opportunities and to build their capacity to plan, design and engage the students meaningfully to accomplish the transaction of a green curriculum in an action-oriented manner.

***Exemplar Guidelines for Implementation of ECCE Curriculum for Children below the age of Eight Years***

The document consists of suggestive guidelines for effective implementation of ECCE curriculum for children up to the age of eight years. It is a guiding document for ECCE service providers, especially teachers and is aligned with the national ECCE policy and the national ECCE curriculum framework



developed by Muskingum Watershed Conservancy District (MWCD). The specific purpose of providing these guidelines is to promote quality and excellence in implementation of ECCE curriculum. This document would develop understanding about ECCE, pre-school curriculum components and provide guidelines for planning and implementation of pre-school curriculum along with assessment of child's learning. Keeping in view of the role of parents in child's learning; strategies for involving parents have also been suggested. The document consists of sample year plan and monthly theme-based plans along with sample progress report card for 3-4 and 4-5 age group. These guidelines will be useful for teachers, teacher-educators, teacher-trainees, researchers, administrators and policy-makers working in the area of ECCE and interested in planning, organising and implementing the pre-school curriculum along with monitoring and supervision of ECCE programme.

### **Quality Improvement through Quality Monitoring Tools (QMT)**

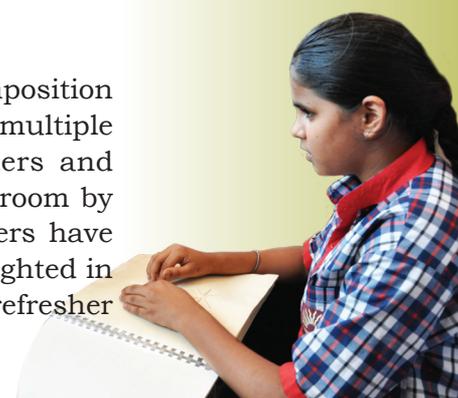
Quality Monitoring Tools are a set of formats to be used at different levels – school, cluster, block, district and state to collect information on various quality parameters related to school and classroom process and provide appropriate feedback for improvement. This is a process-based monitoring in which purpose is not to document or pile up the data but to use it for improving the educational processes. The MHRD entrusted the task of monitoring quality dimensions under *Sarva Shiksha Abhiyan* to NCERT. Accordingly, a set of Quality Monitoring Tools (QMTs) were developed and uploaded on NCERT's website which is now being used by most of the States and UTs. These tools were revised in the light of RTE Act, 2009. Twenty-four States and UTs have sent filled-in Quality Monitoring Tools for the second and fourth quarter. The QMT reports of States and UTs were analysed and feedback was provided for improvement. The national report of the analysis of the filled-in QMTs received from states till second quarter of 2014-15 has been prepared. The state level filled-in monitoring formats and feedbacks offered by NCERT are available on QMT web portal <http://www.ciet.nic.in/QMTs/index.php>.

### **Development of Web Portal for Quality Monitoring Tools**

In keeping pace with the growing use of technology and quick accessibility of information, NCERT was assigned the development of web portal for Quality Monitoring Tools. The web portal has been developed in collaboration with CIET. The materials available on the portal include State Level Monitoring Formats sent by different States and UTs, feedback provided on the QMTs, reports of different workshops, conference and training programme related to QMTs. The link file for web portal is <http://www.ciet.nic.in/QMTs/index.php>.

### **Posters of Stories and Poems for Children**

The posters in the series depict picture stories, poems, picture composition for picture reading. The posters lend themselves towards creation of multiple possibilities to read and write. The guidelines to support teachers and teacher-educators for creating a print-rich environment in the classroom by making use of interesting and age-appropriate print material/posters have also been developed. The display and use of posters have been highlighted in the guidelines. These posters can be used during orientation and refresher



programmes for teachers, teacher-educators and also as a resource material for pre-service teacher education programme.

### ***Guidelines for Creating Reading Corners in Classrooms***

Reading corner is a space in the classrooms that belongs to children where books are easily accessible to them. The reading corner needs to have a good collection of children's literature. Reading corner encourages children to browse and go through children's literature, children's magazine, graded reading series, etc., as an initial encounter with print-rich material. The guidelines developed will enable teachers and teacher-educators to understand the need for a reading corner in a classroom to promote reading as an integral part of teaching-learning processes.

### ***Baal Sahitya ka Chayan – Disha Nirdesh***

Children's literature in Hindi and English for Classes I and II was reviewed and a list of selected titles was created in the years 2008, 2013 and 2014. A set of guidelines has been developed to facilitate the review exercise. The guidelines cover a range of aspects related to children books like illustrations, layout, content, language, sensitivity to social issues and groups. It will help the teachers, teacher-educators, parents, librarians or any other group entrusted with the responsibilities of selecting literature for children.

### ***Baal Sahitya ka Chayan : Prakriya Dastavez***

One of the key elements of Early Literacy Programme is to provide age-appropriate and interesting children's literature to young readers. NCERT has been working on parameters of selection of children's literature i.e., content, illustrations, language, sensitivity on various issues, design and layout and so on. In this context, the council has documented the process of selection of children's literature for primary grades. This document will provide an insight to the States/UTs for selection of children's literature in their regional languages and promote reading habits in primary grades.

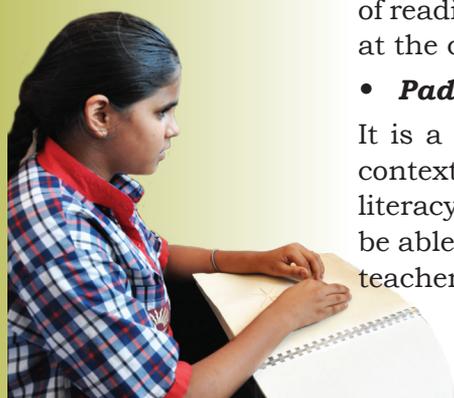
### **Resource Material on Early Literacy and Early School Mathematics Programme (Hindi, English and Urdu Versions)**

- ***Reading for Meaning (English to Hindi)***

The dossier includes articles highlighting the issues related to reading and selection of writings including classics that revolutionised the thinking and understanding of reading in their respective times. The translation in Hindi will make the conceptual ideas about reading available to a wider Indian audience. It is a compilation of articles and papers considered to be classics in the field of reading. These writings approach reading from different angles but converge at the central point of comprehension.

- ***Padhne ki Dehleez Par (Hindi to English)***

It is a collection of articles highlighting the issues in reading in the Indian context. It aims at equipping the teachers with an understanding on early literacy so that they can be decision-makers about pedagogical issues and will be able to function as reflective teachers. This will obviously make them good teachers and motivate children for developing the habit of reading.

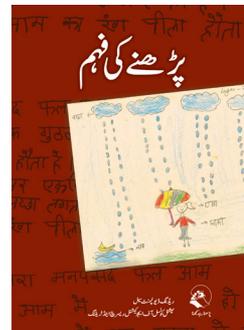


- **Shuruaati Lekhan – Ek Samvad (Hindi to English and Urdu)**

The manual focuses on the understanding of the pedagogical aspect of writing in early years, assessment of children and the linkage between reading and writing. Insightful experiences of teachers highlighting the pedagogical and administrative aspects of the classroom have also been included. It also focuses on developing an understanding on the importance and usage of children's literature in an early literacy classroom and examples provided in the manual will enable teachers to understand the possibilities of creating meaningful practices and changes in the classroom.

- **Padhne ki Samajh (Hindi to Urdu)**

The manual focuses on the understanding of pedagogical aspect of reading, focusing on various aspects of early literacy. It also provides guidelines for conducting orientation programmes for teachers, teacher-educators on the concept of reading. The material is available on the NCERT website at [dee.ncert@nic.in](mailto:dee.ncert@nic.in). The guidelines will be useful for the state authorities while organising training programmes.



- **Mathematics Learning Kit**

Mathematics Learning Kit (MLK) for Classes I and II was designed and field-tested. On the basis of the feedback received from field trial, the items were modified and redesigned. The MLK was created with an objective to develop child-friendly and mathematically demanding in early school classrooms. The kit is also designed to include



children with special needs. A user manual consisting of various activities which can help development of mathematical thinking using the MLK has also been developed and finalised in English as well as in Hindi. The MLK along with the manual would be made available to the stakeholders in the next academic year.

- **Teacher Training Manual**

The teacher training manual in mathematics for Classes I and II has been revised. New chapters on Continuous and Comprehensive Evaluation (CCE) have been drafted and other chapters have been revised in the light of socio-cultural milieu of young learners. The development of Hindi version of the teacher training manual in mathematics is in progress.

- **Textbook in Language Education for B.Ed. Programme in Urdu**

Syllabus and textbook in language education for B.Ed. programme in Urdu was developed to incorporate recent developments in Urdu language education. This will help in apprising student-teachers with various aspects of Urdu language education. The book will cater to the enrichment of subject content and pedagogy of language. The textbook will be utilised by student-teachers and teacher-educators.



### **Support Material – Print/Audio-Video in Urdu for Second Language Learners to Promote Reading and Writing**

School visits, surveys and interactions pointed out that learners of Urdu develop skills of listening and speaking but are slow in developing reading and writing skills. This adversely affects their academic performance at later stages. A support material for creating and sustaining the interest of the learners in Urdu language has been developed. Along with the audio-video material, the material is developed in print also. This material will be useful to develop Urdu language proficiency in learners, who take up Urdu as a second language. The content of the material is based on the needs of the learners. The support material is developed in consultation with language and media experts, practising teachers and members of faculty.

### **Syllabus and Textual Material for 'Creative Writing and Translation in Urdu' at the Higher Secondary Stage**

To create awareness of the challenges and possibilities presented by linguistic and cultural differences in the context of globalisation and the dynamics of the multilingual characteristic of Indian society, a course on 'Creative Writing and Translation in Urdu' has been visualised. This course will be an elective course and will enable the students to write creatively in different genres. Syllabus and textual material of the course have been developed.

### **Supplementary Readers of Hindi for the Upper Primary Stage**

Three supplementary readers in Hindi for upper primary stage have been developed. Materials for these readers have been selected from Indian folk-tales and stories by famous story writers in Hindi in different literary genres. The objective is to provide relevant reading materials for enhancing the reading skills of children at upper primary stage.

### **Tactile Map Book in Geography for Students with Visual Impairments**

Tactile map book for students with visual impairments has been developed. The map book, based on geography curriculum of Classes VI to VIII, includes twenty-five maps and diagrams (tactile) and covers basic map skills. The map book will guide students about north line, directions, scale, latitude and longitude, distinguishing continents and oceans, land and water and state boundaries, physical and political divisions of India and important physical features. The description of each diagram and map has been given in English and Braille both. The content, cost effectiveness and compatibility with the end user has been integrated to the best to bring out a balance between geographical concepts and special needs of students with visual impairments. Tactile maps have been tried out



*Visually Challenged Student observing tactile maps in special school*

in the special schools, Govt. School for the Blind, Basishtha, Guwahati, Assam; The School for the Blind, Narendra Nagar, Ramkrishna Mission, Kolkata,

West Bengal; Shri Hanuman Prasad Poddar Andh Vidyalaya, Varanasi, Uttar Pradesh; Bhima Bhoi School for the Blind, Bhubaneswar, Odisha; National Association for the Blind, R.K. Puram, New Delhi and Saksham School, Noida before giving final shape to the map book.

### ***Geography Kit***

A prototype geography kit has been developed for upper primary, secondary and higher secondary stages of school education. Several models related to basic concepts of geography such as rotation and revolution of the earth and the moon, 3-D model of latitudes and longitudes, 2-D model of latitudes and longitudes, wind vane, barometer, potter's wheel, zig-saw puzzle based on political map of India, telescope, rock and mineral samples, etc., have been included in the kit. Activities based on district series maps have been used in this kit for enhancing map reading, interpretation and analytical skills among students. These map-based activities will also promote basic understanding of geospatial techniques at secondary level and higher secondary levels. The models developed for geography kit have been tried out.

### ***e-Learning Material in Geographical Information System***

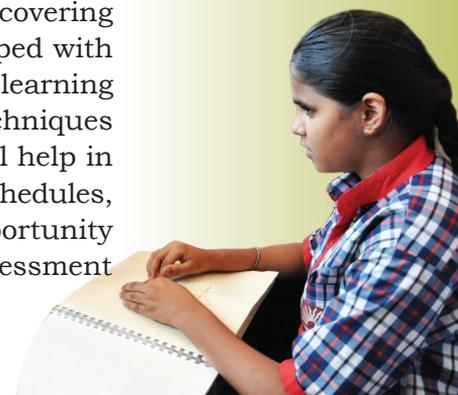
e-learning materials in Geographical Information System (GIS) have been developed. To reach out to large number of teachers and students of the country, e-learning materials in GIS have been developed on open free software. In this connection, the Geoportal School Bhuvan-NCERT URL: <http://bhuvan-staging.nrsc.gov.in/projects/ncert/> has been launched in collaboration with National Remote Sensing Centre, ISRO, Department of Space, Hyderabad. Geo-portal GIS-based interactive activities have been included at three different levels for making learning relevant and joyful for all levels of school education.

### ***Dictionaries of Economics and History for Schools (English-Hindi-Urdu)***

The dictionaries of Economics and History for Schools (English-Hindi-Urdu) cater to the needs of students from upper primary to higher secondary stage. These dictionaries provide explanation of various terms and concepts in all three languages at one place. The terms and its explanations have been given in all three languages together so that students can refer to any version whichever s/he felt comfortable and also find out its explanations in the other languages. These dictionaries will be useful to all who are engaged in teaching-learning of Economics and History in any of the three languages.

### ***Source Book on Assessment in Social Sciences for the Upper Primary and Secondary Stages***

A source book on assessment in social sciences for secondary stage covering geography, economics, political science and history has been developed with the objectives to focus on the effective measures required for teaching-learning of social sciences at secondary stage, to understand the different techniques and procedures of evaluation in social sciences. The source book will help in developing appropriate skill-based questions, rating scales, interview schedules, observation schedule, portfolios, checklists to provide adequate opportunity for self-reflective practices in the classroom and to plan innovative assessment measures.



***Hindi and Urdu Version of the Supplementary Reader on Great Thinkers of Modern India***

Hindi and Urdu versions of the supplementary reader on Social Thinkers of Modern India: Contemporaries of Swami Vivekananda has been completed. The booklet includes the achievement and contribution of social thinkers who were contemporary of Swami Vivekananda. This book will be useful as a supplementary reader to impart different values, both for the teachers and students.

***Textbook on Health and Physical Education at Secondary Stage (English-Hindi-Urdu)***

A textbook on Health and Physical Education for Class IX has been prepared. The textbook has fourteen chapters which focus on health concerns, physical education, individual and team games, sports training and ethics. Yoga for personality development has also been a part of this textbook. It has also included topics related to food and nutrition and consumer and social health. Efforts have been made to make this book illustrative. Since health and physical education has been included in the curriculum at secondary level, hence this will be useful for the teachers of CBSE and state boards.

***Textbook of Human Ecology and Family Sciences for Classes XI and XII (Hindi Version)***

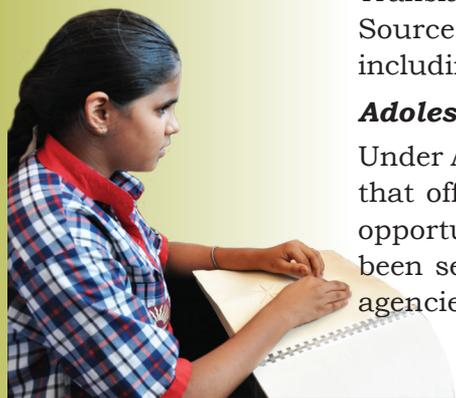
The textbook on Human Ecology and Family Sciences (HEFS) has taken a holistic approach to address the pertinent issues related to work, employment and careers, keeping quality of life in perspective, individually and collectively. HEFS provides numerous avenues with interdisciplinary perspectives. This textbook will make the subject free of gender bias and capable of challenging young minds and teachers for creative study and practical work. The manuscript of Human Ecology and Family Sciences textbook for Classes XI and XII (Hindi version) has been finalised and is under publication.

***Materials in Population and Adolescence Education***

New materials in population and adolescence education have been developed. Under Adolescence Education Programme (AEP), funded by UNFPA, NCERT developed an advocacy material for various stakeholders. Development of material for teachers as a counsellor was reviewed and a fresh material for teacher as counsellor under Adolescence Education Programme has been prepared. Issues and concerns related to counselling, especially in the context of the Adolescence Education concerns, are integral part of this material. Translation of AEP resource and training material in Hindi is under progress. Source book of population education has been reviewed and updated by including data and information related to population education concerns.

***Adolescence Resource Centre***

Under Adolescence Education Programme, an online portal ([www.aeparc.org](http://www.aeparc.org)) that offers uninterrupted access to varied resources and virtual interaction opportunities on issues related to adolescent health and well-being have been set up by NCERT in partnership with UNFPA and other implementing agencies. This website will serve as a knowledge bank for materials, and



resources, both print and audio-visual, related to adolescence and largely act as a virtual platform to learn more on issues related to adolescent health and well-being. The resource centre also hosts an Electronic Discussion Forum (EDF) to enable teachers to share their concerns, anxieties and insights for better implementation of Adolescence Education. School teachers and others who are engaged with the programme can raise issues related to adolescence and ensure meaningful interactions on varied topics. Other features of the portal include AEP-MIS feature, which provides information on key indicators related to AEP implementation. The 'question box' pertains to adolescence issues, the health and well-being and other issues of this age group. Events and announcements keep users and visitors abreast with the upcoming events. Users can also access information from other organisations working on similar themes.

### **Video Series on Arts Education at the Elementary Stage**

A series of video films have been developed covering different aspects of teaching-learning and evaluation in arts education at elementary level. Five films of different duration have been made in collaboration with CIET which will be utilised during teachers' training. Themes for the films were identified in a workshop and their scripts were developed. A series of 17 short films on various traditional crafts and its educational implications have been developed in collaboration with the crafts museum. The film *Vidyalayo mein Kala Shiksha* shows the interaction with teachers from different states who discuss the present status of arts education in schools. *Khel Khel Mein* is a film on Arts as Pedagogy at primary level. *Ek Kaksha Aisi Bhi* shows how different subjects can be taught through art forms. *Jab Hum Ghumne Gaye* is a set of three films which has been made on visit to a neighbouring monument of *Kila Rai Pithora*, Saket Road, New Delhi. The first part is the preparatory classroom activities, and the second part is on the visit to the monument of *Kila Rai Pithora* and the third one is on post-visit presentation at school. The film *Storytelling Ananse: The Trickster* is a film on storytelling for primary classes.

### **Training Package on Continuous In-service Teacher Professional Development in Arts Education for Secondary Level**

A training package on Continuous In-service Teacher Professional Development in Arts Education for Secondary Level has been developed under RMSA keeping in view the requirement of secondary teachers across the states. The package in three sections: (i) addresses the curricular concerns of generic nature dealt at secondary stage; (ii) pedagogical and content-related issues of all form of arts and; (iii) provides information on courses, institutions and careers in art-related fields. The package also addressed the generic issues such as integration of arts in school curriculum, understanding the



*A workshop on bamboo and cane craft of Assam held at RIE, Ajmer from 9 to 14 February 2015*



learner who is adolescent and their need, inclusive classroom, role of an art teacher and learning about resources and establishing a resource centre in school. The package targets the secondary teachers of music, fine arts, dance and theatre.

### ***Teachers' Handbooks in Music, Dance and Theater***

Three teachers' handbooks in music, dance and theatre have been tried out in schools and finalised. These handbooks have been developed with the objectives of i) learning the art forms as subject specific areas, ii) awareness of country's cultural diversity in all forms of art, iii) awareness of the natural intrinsic bond of art form with subject areas such as geography, history, sociology, linguistics, economics and the sciences, iv) emphasising on the inter-relationship within the arts, v) application of performing arts as therapy for the development of sensory motors, cognition, physical ability, group co-ordination (teamwork and leadership quality), joyful learning etc., vi) inclusive aspect, and vii) evaluation in art forms. As performing arts are incomplete without multimedia materials, a collaboration has been worked out with *Prasar Bharti* for important recordings from Doordarshan archives have been compiled, edited and packaged in DVDs. The DVD in both vocal music and instrumental classical music have recordings of artists like M.S. Subbulakshmi, Pt. Ravi Shankar, Ustad Bismillah Khan, Dr Balamurlikrishnan, Lalgudi Jayaraman etc. The DVD of regional music (vocal and instrumental) and dances (Part 1 and II) consists of the geographical description, habitat, costumes, varied social themes expressed through different art forms from the states of Jammu and Kashmir, Madhya Pradesh, Assam, Karnataka, Uttarakhand, Himachal Pradesh etc. Important theatrical presentations like *Agra Bazaar*, Gombayetti Dance etc., have been customised and packaged to benefit the children in different schools to build awareness among the present generations about theatre.

### ***Gender Concerns in Education: A Module for RMSA Functionaries***

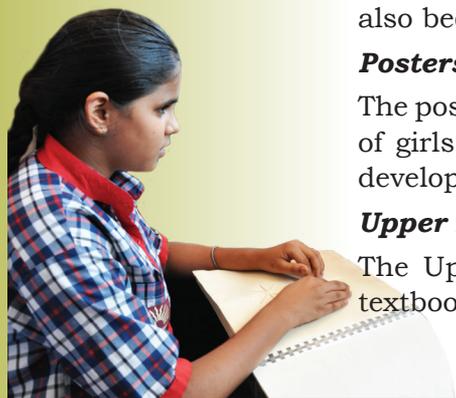
To sensitise RMSA functionaries on gender issues in education at the secondary stage, the module contains suggestive activities for addressing gender bias and stereotypes in the teaching and learning process. The module focuses on integrating gender concerns in disciplines of science, social sciences, mathematics and languages offered to children at the secondary stage of education. The module contains guidelines for assessing textbooks including other materials used by students and teachers from the gender perspective. Section on hidden curriculum is made for teachers and other stakeholders to reflect on attitudes and behaviours transmitted in the teaching and learning process. Classroom management techniques and assessment processes have also been discussed in the manual.

### ***Posters and Messages on Girl's Education and Empowerment***

The posters and messages are meant to sensitise all stakeholders on promotion of girls' education and their overall empowerment. These intend to help in developing an overall positive approach towards girls' education.

### ***Upper Primary Science Kit***

The Upper Primary Science Kit has been developed based on the science textbooks developed by NCERT. It offers scope for more than 200 activities



as outlined in the kit manual. The kit contains more than 130 scientific and general items, chemicals, glassware, etc. It includes hand-operated generator with kerosene burner, ray streak apparatus, bell jar, permanent slides, etc. Special apparatuses for performing activities using micro-scale chemistry technique have also been included in the kit.

### **Secondary Science Kit**

The kit has been developed along with its manual. It provides scope for various learner-centred activities based on the chapters of science textbooks for Classes IX and X. Besides these activities, laboratory experiments prescribed by CBSE for Classes IX and X can also be done using this kit. It is a complete portable laboratory. The kit contains more than 107 scientific and general items, chemicals, glassware, etc. Some of the main items included in the kit are compound microscope, dissecting microscope, electroscope, multi-meter, resistance boxes, kerosene burner, electricity and magnetism kit, optics kit, spring balance, etc. The kit can be used in place of traditional science laboratory. There is special provision for use of micro-scale chemistry lab technique, which reduces the wastage of chemicals, hazards and is also environment-friendly. In the manual, structured performing steps are suggested to facilitate the sequential development of the concepts. Motivational questions on the activity are also suggested. Wherever required, the hints for questions are given.

### **Senior Secondary Micro-Scale Chemistry Laboratory Kit**

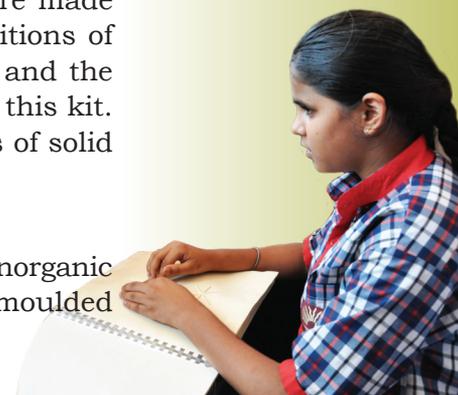
The micro-scale chemistry laboratory technique not only reduces chemical waste without hazards and pollution, but also provides sufficient time to do number of experiments to clarify a concept. Use of micro-scale chemistry laboratory techniques has the benefits of reducing chemical waste by schools and helping the students learn about waste minimisation techniques, reducing cost of materials, saving the time required for preparation and minimising health risks to students and teachers in the school laboratories. The kit needs only smaller storage area and it also reduces reliance on intensive ventilation systems with a significant reduction in electricity and water consumption. All the chemistry practical at Classes XI and XII level can be performed using the kit. One kit is suitable for four students having a rotatable top to hold the reagent bottles. It has 43 items and is accompanied by a detailed manual describing the use of items and details of each experiment.

### **Solid State Model Kit**

The kit consists of a plastic moulded platform, dowels and PVC hollow balls of two different diameters. On the top side of the platform, holes are made at the vertices and centre of regular hexagons which show the positions of atoms in a unit cell. These holes can receive friction fitting dowels and the crystal structures can be clearly visualised and understood through this kit. It is accompanied by a manual to help the user learn basic concepts of solid state structures.

### **Molecular Model Kit**

The kit enables the students to explore the structure of simple organic, inorganic molecules and solids. This self-learning kit contains various plastic moulded



atoms having a number of prongs and shapes in various colours. The kit can be used to make models for most of the molecules as discussed in the textbooks for Classes XI and XII. Structure of organic molecules and isomerism in organic molecules, network and other inorganic molecules can easily be built using the kit. A detailed manual is provided that will guide the students to build the structure of molecules with the kit items.

#### ***Upper Primary Mathematics Kit***

The kit has been designed to enable the students to do various activities for learning mathematics concepts at upper primary level. The items include cubes, strips, cutouts of various shapes, an innovative geoboard, abacus, etc. The kit has a manual to enable the students to do the activities with kit items.

#### ***Secondary Mathematics Lab Kit***

Using this kit, different types of activities for learning concepts of mathematics at secondary stage can be carried out. This kit consists of 20 items that include strips A and B type, cutouts with cuboids of various shapes, an innovative geoboard, Trigonometric Circle Board, Pythagoras Theorem Square with five cutouts, Algebraic tiles, etc. The kit has a manual to enable the students to do the activities with kit items.

#### ***Secondary Science Lab Kit (Biology)***

The kit has been developed based on the laboratory manuals of science for Classes IX and X. This kit consists of more than 40 items. It helps in carrying out prescribed experiments related to the theme 'The World of Living' in the laboratory manual.

#### ***Secondary Science Lab Kit (Physics)***

The kit helps in carrying out experiments prescribed at Classes IX and X under the theme 'Moving Thing, People, Ideas, the Natural Phenomenon and How Things Work'. It consists of more than 50 items.

#### ***Secondary Science Lab Kit (Chemistry)***

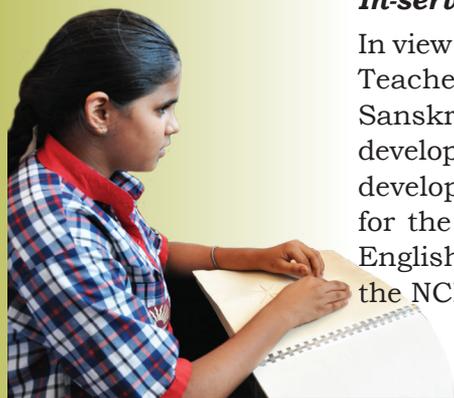
This kit consists of more than 40 items and enables the students to do experiments using microscale chemistry laboratory techniques related to the theme 'Materials at Secondary Stage'.

#### ***Biology, Physics and Mathematics Kit for Higher Secondary Stage***

In order to equip rural/remote area schools for hands-on activities for biology, physics and mathematics at higher secondary stage, the kits were developed and finalised along with user's manual.

#### ***In-service Teacher Professional Development Packages***

In view of addressing the need of States/UTs for support material for In-service Teacher Professional Development (ITPD) programmes, ITPD packages for Sanskrit, Urdu and arts education, integrating generic concerns have been developed. The packages intend to evolve a mechanism of teachers' professional development incorporating continuity, flexibility, and inclusive components for the secondary stage teachers. ITPD packages for Science, Mathematics, English, Hindi and Social Sciences were also developed and are available on the NCERT's website ([www.ncert.nic.in](http://www.ncert.nic.in)).



### **Regional Workshop on Assessment and Examination Practices**

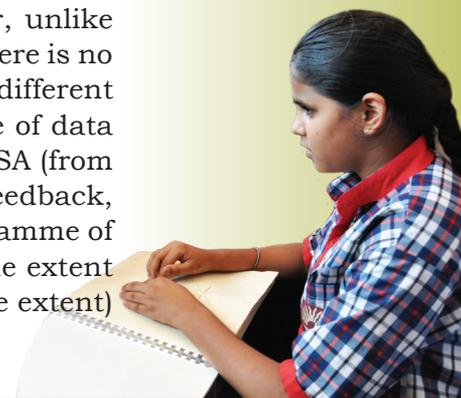
In view of RTE's recommendations for CCE at the elementary stage, a need was felt for reflecting on the prevailing system of examination practices in schools at the secondary stage and also to seek views and experiences of various stakeholders including teachers on formulation, implementation and impact of CCE scheme at the secondary stage. Keeping in view the common concerns, five regional workshops on assessment and examination practices at the secondary stage were conducted to interact with different stakeholders at the secondary stage. Two regional workshops were held in 2014-15, at RIE, Bhubaneswar from 1 to 3 September 2014 and NERIE, Shillong from 19 to 21 August 2014. The workshops not only helped in sharing assessment practices in different regions but also in building perspective and capacity of the participants from SCERTs, school education boards on the pedagogic aspects of CCE, learning continuum, learning indicators, etc. As per the demands of States/UTs and also the recommendation of National Resource Group (NRG) for the brief packages exclusively on gender sensitisation, guidance and counselling and inclusive education to be used by States/UTs for different stakeholders, development of these packages has been undertaken. Draft gender sensitisation package and guidelines for guidance and counselling have been developed and is placed on NCERT's website for feedback from different stakeholders.

### **Exemplar Continuous and Comprehensive Evaluation (CCE) Package**

Keeping in view the importance of evaluation for child's learning and the difficulties teachers are facing and the weaknesses in the present CCE schemes developed by various agencies and states, and also States' demands for a feasible scheme of CCE, development of a model CCE exemplar package for teachers has been undertaken by RMSA. Five workshops on development of learning indicators in all school subjects' viz., Science, Maths, Social Sciences, Physical Education, Art Education and languages viz., Hindi, Sanskrit, English and Urdu were conducted wherein the learning indicators both broad and specific were developed for Classes IX and X.

### **Quality Assessment Tools**

One of major goals of RMSA is to provide quality secondary education to all adolescents between the ages of 14-16, with a focus on gender equality. To achieve this, a number of quality interventions have been undertaken such as the recruiting of secondary stage teachers, providing in-service teacher training, establishing integrated science laboratories, arts and crafts centres, libraries and computer rooms, and organising extended teaching sessions, science exhibitions, and book fairs, etc., which are reflected in the Annual Work Plan and Budget of all the States/UTs. However, unlike areas such as access, enrolment, attendance, infrastructure, etc., there is no adequate mechanism currently in place to measure quality amongst different stakeholders. This prevents stakeholders from making efficient use of data or quality interventions. Also, while structures are in place under SSA (from states to cluster levels) to monitor the effectiveness of tools and feedback, such structures are currently not available under the flagship programme of RMSA; particularly lower than the district levels. Thus, to gauge the extent of correspondence between planning, execution and impact (to some extent)



of the various quality interventions, NCERT has undertaken the development of Quality Assessment Tools (QATs) through a series of workshops with the representation of the States/UTs and are available for sharing with the States/UTs.

### **Educational Media Programmes**

In all, about 786 educational television programmes including lectures in various subjects at secondary and senior secondary levels have been produced to support the enhancement of teaching and learning. Major programmes of video lectures were in Mathematics, Biology, Chemistry, History, Hindi, Sociology and Physics. Other programmes were 'Patron Ke Uttar', 'Art and Craft', 'Children Stories', 'Chemistry Laboratory Experiments', 'Maths Activities' and coverage of important events. It also includes educational activities held at NCERT and outside NCERT.

About 658 audio programmes including 426 chapters of 24 audio books in daisy format were produced. Major programmes of audio series were *Aao Quiz Karein*, English (for Classes VI and X), Economics (for Classes IX and X), History (for Classes IX and X), Hindi (for Classes VI, VII, VIII, X and XII), Political Science (for Class X), History (for Classes VIII and IX), Sanskrit (for Classes VI, VII and VIII) and Urdu (for Class IX).

Audio-video programmes are disseminated through sales counter at CIET and book fairs/exhibitions organised in different states and national level, individuals and organisations. Besides, the audio and video programmes, DVDs are disseminated through postal system.

### **National Repository of Open Educational Resources**

The National Repository of Open Educational Resources (NROER) is an initiative to bring together all digital and digitisable resources across all stages of school education and teacher education. This will span all subject domains and will be available in all Indian languages. It proposes to use these digital resources to reach out and connect all members of the school community through a variety of events and interactions. Currently, NROER has more than 15,000 resources of various categories including videos, audios, documents, interactive objects and images. Till 31 March, 2015, a total of 1,14,731 unique visitors visited over 24,75,387 pages on NROER and has 15,110 registered users. Resources are available in about 29 different languages, including tribal languages (Limboo, Lepcha, Bhutia from Sikkim, Kokborak from Tripura, Santhali and Khortha from Jharkhand, Methei from Manipur, Ao and Tenyidie from Nagaland, Garo and



*Making of Audio-Video programmes at CIET studio for National Repository of Open Educational Resources (NROER)*

Khasi from Meghalaya, Galo from Arunachal). The repository currently hosts concepts from Classes VI to X and will soon span Classes I to XII in Science, Social Sciences, Mathematics and Arts Education. The resources include textbooks, audio, video, photographs, charts, maps and interactive content. A steady flow of audio, video and interactive resources has been established from a variety of agencies; State Institutes of Educational Technology (SIET) from Kerala, Andhra Pradesh, Maharashtra, Gujarat and Bihar have shared their collections regularly. Some SCERTs like SCERT Manipur and SCERT Tripura have sent in their audio programmes. Core teams have been set up in each State and UT and oriented to NROER activities through seven training programmes. These teams are actively organising different state level activities for NROER, particularly translation into their languages.

### **ICT Curriculum and ICT Courses for Teachers and Students**

ICT curriculum for teachers and students have been developed that revolves around the following six strands; (i) connecting with the world; (ii) connecting with each other; (iii) creating with ICT; (iv) interacting with ICT; (v) possibilities in education; (vi) reaching out and bridging divides. The ICT course for students (Classes VI to XII) is proposed to be delivered in three years (3 sessions per week, 30 weeks per year and 90 weeks in three years) by Boards of Secondary Education in India. The ICT course for teachers includes three induction and 14 refreshers to be delivered as two-year diploma through face-to-face and online mode. Course materials have been developed and uploaded on [web:http:ictcurriculum.gov.in](http://web:http:ictcurriculum.gov.in). The course for students was conducted in 588 Navodaya Vidyalayas on a pilot basis. For successful implementation of the course, all the JNV principals and 200 computer/ICT teachers were oriented through face-to-face mode.

### **Resources and Support for Web and Online Activities**

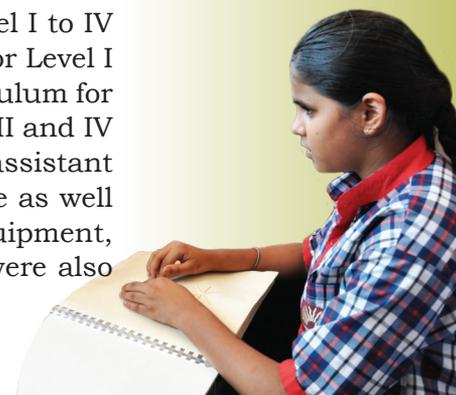
The institute is constantly engaged for development and maintenance of the following websites: [www.ncert.nic.in](http://www.ncert.nic.in); [nroer.gov.in](http://nroer.gov.in); [ictschoools.gov.in](http://ictschoools.gov.in); [ictcurriculum.gov.in](http://ictcurriculum.gov.in). Converting of textbooks into e-books linking it to a range of the web resources is under process and is also available on the website.

### **Curricula of Banking, Financial Services and Insurance for Level I to IV under NSQF**

Curricula of Banking, Financial Services and Insurance (BFSI) for Level I to IV under National Skill Qualification Framework (NSQF) have been developed as per the direction given by the NSQF Cell.

### **Curricula on Apparel, Made-ups and Home Furnishing Sector for Level I to IV under NSQF**

Curricula on apparel, made-ups and home furnishing sector for Level I to IV under NSQF have been developed. The structure of the curriculum for Level I to IV was discussed in detail and it was decided to develop core curriculum for apparel, made-ups and home furnishing for Level I and II and Level III and IV for orienting towards job roles of apparel production assistant and assistant fashion designer (apparel). The content was developed for knowledge as well as practical activities for all the four levels. Details of tools and equipment, teacher's qualification, reference books and instructional material were also included in the curriculum.



### **Curricula on Hospitality Sector for Level I to IV under NSQF**

Curricula on hospitality sector for Level I to IV under NSQF have been developed. The structure of curriculum was discussed at length and a consensus was arrived at to prepare common curriculum for Level I and II consisting of the core essentials of hospitality sector and Level III and IV oriented towards job roles of house attendant and housekeeping supervisor, respectively. Subsequently, the content was chalked out for knowledge as well as practical abilities for all the four levels. It was then refined and written in the format followed by NSQF curricula. Other parameters like teacher's qualifications, tools and equipments required for transaction of the curricula were also discussed and included in the document.

### **Curriculum on Travel and Tourism Sector for Level I to IV**

The working group meeting for development of curriculum for travel and tourism sector for Level I to IV under NSQF was conducted at IITTM, Gwalior. In all five curricula (one each for Level I to III and two for Level IV) have been finalised and printed.

### **Competency Based Curriculum in Retail Sector under NSQF**

The curricula was revised as per the new qualification packs developed by Retailers Associations Skill Council of India (RASCI) for the job roles retail bagger, store operations assistant, cashier, retail merchandiser, customer service associate, trainee associate and sales associate. Based on the change in the curricula, suitable information and activities were incorporated as per the job roles and competencies in the units of student workbooks Level I to IV. The curricula and student workbook for Level I to IV in retail sector have been finalised.



*Release of Competency Based Curriculum for Agriculture sector under NSQF*

### **Competency Based Curriculum for Agriculture Sector under NSQF**

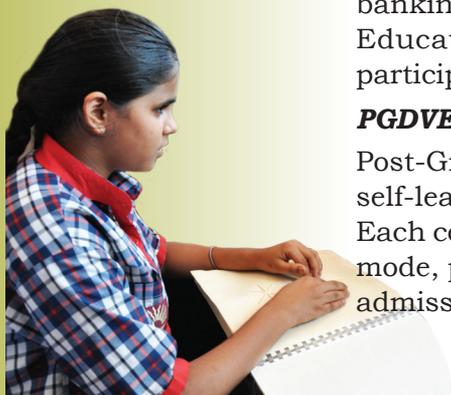
The curricula of Level I to IV for five job roles viz., paddy worker, sugarcane cultivator, micro-irrigation, hatchery production worker, dairy worker have been developed. A total of twelve curricula in agriculture sector have been developed and printed.

### **Competency Based Modular Curriculum for Health Sector under NSQF**

The curriculum under reference is in the job role of medical lab tech, blood banking, Histo technician. The programme was held at Zonal Institute of Education and Training, Kendriya Vidyalaya Sangathan, Mumbai. The participants reviewed and developed the health care curriculum.

### **PGDVE Course Guide and Self Learning Material**

Post-Graduate Diploma in Vocational Education (PGDVE) course guide and self-learning material was reviewed in the workshop held at RIE, Bhopal. Each component of the course guide viz., course structure, delivery in blended mode, phases, duration, assessment, evaluation and examination guidelines, admission procedure, etc., were reviewed and have been finalised.



**Engineering Courses under NSQF**

The curriculum and instructional material for Level I for the courses namely manufacturing technology, electrical and electronics technology, repair and maintenance of computer and peripherals, building construction, web developer and software developer have been reviewed and finalised.

**Pedagogical Execution of Mathematics Educational Papers of Different Courses through Mathematics Resource Room**

A four-day workshop for B.Sc.B.Ed. IV year (physical group) students was conducted during pre-internship. Students were given extensive training for their four-weeks internship period from 8th August to 24th September 2014. Five workshops have been conducted in different schools where the pre-service students were doing internship. Feedback performas were filled-in and the data was compiled. Based on the findings, course designing of methods of teaching mathematics and a resource room for pre-service mathematics teachers have been designed.

**Green Chemistry Lab in the Institute**

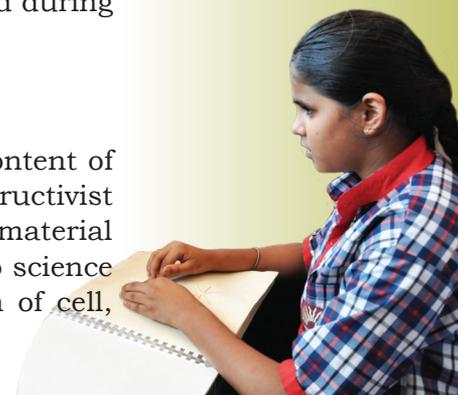
A Green Chemistry Lab has been set-up in the institute using the micro-scale chemistry laboratory kit for senior secondary level and procurement of 25 sets of micro-scale chemistry kit developed and designed by Goa University. A laboratory manual for undergraduate classes has also been developed. This was an experimental edition of the manual 'Greener approach towards chemistry experiments for undergraduate level'.

**E-Content Modules in Science at the Secondary Level using FOSS and web 2.0 Tools**

E-content modules on the line of constructivist approach using FOSS and web 2.0 tools have been developed to facilitate teachers in teaching science. A few chapters, each in biology, chemistry and physics, were selected and free and open source software was downloaded to develop the content. E-learning was selected to frame the content and FOSS was selected for evaluation. The developed e-modules were tested online. Students of Class IX and X of DMS, NVS and KVS participated in the evaluation process of the developed e-modules. First a pre-test was conducted and then the students were allowed for self-study through on-line mode following which the drop-down activity performed by the students was evaluated on-line. The evaluation was done off-line as well. After the evaluation of drop-down activities of the modules have been revised. A post-test was conducted, which had an upper edge to the pre-test. The e-modules prepared were tested in five schools. DVD and CDs have been made for convenience and disseminated for using it as a teaching-aid during the teaching-learning process.

**Resource Material to Create Constructivist Learning Situation in the Science Classroom at Secondary Stage**

The strategies based on constructivist pedagogy that suits to the content of upper primary science were identified on the basis of which the constructivist resource material for learning has been developed. The resource material was developed through workshops which contains themes related to science teaching such as fundamental unit of life, structural organisation of cell,



tissue, transportation in plants, transportation in human beings, respiration in plants, respiration in animals, nutrition in plants, nutrition in human beings, reproduction in plants, reproduction in animals, control and coordination, diversity in living organism, human eye, defects of vision and their correction, biogeochemical cycles, natural resources, types of chemical reactions, acids, acidic substances, metal and non-metal, periodic table, more about salts, structure of atoms, Archimedes principle, electric current through conductors, sources of energy, magnetic effects of electric current, Newton's laws of Motion and motion.

***Resource Material to Create Constructivist Learning Situation in the Classroom at the Upper Primary Stage (Social Science, Science and Languages)***

The different concepts in social science, science and languages at upper primary level were analysed and the lesson plans were designed on the basis of content. The resource material was developed which contains themes such as constructivist learning and role of teachers, development of constructivist approach, knowledge of basic assumption and principles, knowledge of learning experiences etc. The material on constructivist learning situation in classroom at upper primary stage for social science, science and languages in the form of package will be helpful for teachers. The teachers will be able to apply constructivist approach in their classroom and develop learning situations to facilitate learning.

***Four-year Integrated Teacher Education Programme for the Pre-primary and Primary School Stages***

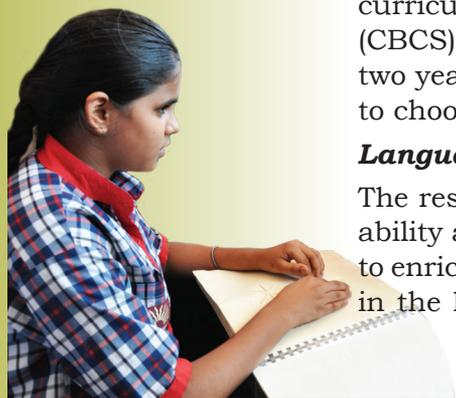
The structure of the B.Ed. programme was developed, the different activities of the programme were identified and the syllabi of different courses were prepared. It spells out in detail the school experience activities in the programme, nature and modalities of evaluation and also suggests ways and means of upward mobility opportunities – educational and professional to the students. The course structure has been developed which is divided into foundation course, prospective courses, language, pedagogy, context, skill development, sensibility development, optional courses, core training and internship.

***Two-year Integrated Choice Based Credit System M.Sc. (Life Science) Education Curriculum***

The two-year integrated M.Sc.Ed. (Life Science) curriculum was developed which aims at preparing competent teachers and teacher-educators in life science for the higher secondary and tertiary level. As per the UGC guidelines and direction of Utkal University, Bhubaneswar, the M.Sc.Ed. (Life Science) curriculum has been restructured on the basis of Choice Based Credit System (CBCS). This curriculum will be of four semesters and 100 credits spread over two years. There is free elective in the curriculum in which students are free to choose any paper other than life science.

***Language Ability among Pre-service Teachers/In-service Teachers***

The resource materials were prepared with an intention to develop language ability among pre-service teachers/in-service teachers. These were developed to enrich the knowledge about the functions of language in teacher preparation in the light of constructivist pedagogy. It focused on the idea that not only



language teachers but teachers who teach the content areas also needs to realise the importance and role of language in teaching-learning process and equip them with subject-specific contextual language so as to make their teaching effective.

***Syllabus of Four-year Integrated Bachelor of Science Education Course of RIEs***

As part of the revision of Bachelor of Science Education (B.Sc.Ed.or B.Sc.B.Ed.) course of RIEs, a workshop was conducted with the faculty from all the constituent units of NCERT. The syllabus has been finalised.

***Pedagogical Tools and Material for School Attachment Programme of Integrated Pre-service Teacher Education Courses***

The existing pedagogical practices and pedagogic tools used by the teacher education institutions at secondary level were revised and sample lesson transcripts with audio and visual support for teaching at secondary level were prepared. The pedagogical tools for assessment of skills of classroom process, the lesson design, assessment profiles, assessment indicators and student journals for teaching secondary and higher secondary level, exemplar lesson transcripts in different subjects with audio and visual support for teaching at higher secondary level were developed.

***Certificate Programme in Educational Research Methodology***

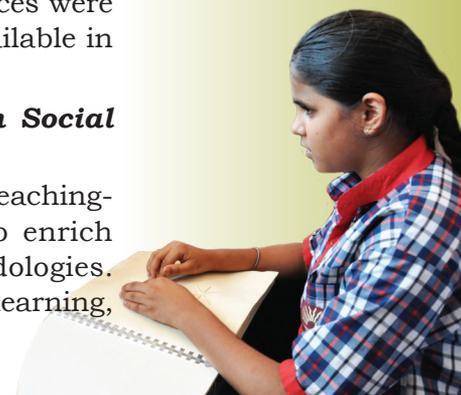
The designing part of the Certificate Programme in Educational Research Methodology (CERM) was done during the year 2013-14. The tryout of the CERM was done in 2014-15. The course is being offered for the state functionaries on trial basis. Two face-to-face contact programmes were conducted as part of the programme from 17 to 26 November 2014. The evaluation of the modules was also done as part of the programme. The CERM has been finalised and is ready to be launched as online course.

***Development of Materials on Constructivist Approach to Pedagogy and Resources for Teaching of Social Science at the Upper Primary Level in the State of Nagaland***

The main objectives of the programme were to develop materials for understanding the philosophy and spirit of constructivist approach to teaching and learning, to develop constructivist framework and strategies for lesson planning and transactional modalities and to develop exemplars of constructivist learning design/lesson plan for teaching of social science at the elementary level. The material developed included an introduction on constructivist approach, a sort of exemplar lesson plans of the topics discussed in the subjects being taught in Nagaland. The resources for teaching and learning of social sciences were also identified which were local-specific and based on what were available in Nagaland.

***Development of Supplementary Teaching-learning Material in Social Science for Class VI in the Context of Arunachal Pradesh***

The specific objectives of the programme were to suggest appropriate teaching-learning methods and materials in the light of NCF-2005 and to enrich teachers and teacher-educators on child-centric teaching methodologies. These methodologies project method, problem-solving, activity-based learning,



participatory approach to learning, etc., to promote constructivist and joyful learning relevant to the context of the Arunachal Pradesh and to enable the teachers and teacher-educators to update and upgrade the knowledge of social science with local, regional, national and global perspective. The materials had the examples from the state of Arunachal Pradesh. The concepts and issues have been explained keeping in view the uniqueness and diversity of the state.

#### ***Design and Development of Earth Science Kit for the Secondary Stage***

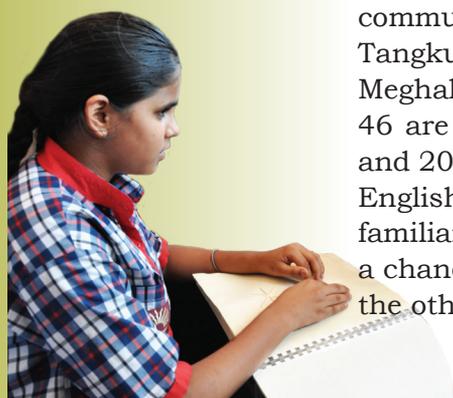
The Earth Science Kit provides preliminary knowledge of how the earth has evolved, its geologic past (palaeogeography), the resources it provides, etc. This will help children to understand the pain that mother nature took in the geologic time scale to be in the present state which mankind as on today keeps on scouring with least respect towards sustainability. Further, children must also know that the earth belongs not only to *Homo Sapiens* but to millions of other biota. Observation and handling of models and kits related to Geology will help children have an understanding of Mother Earth and a few of its processes. It will help in developing experimentation and scientific knowledge of earth and make learning more joyful and yet comprehensible. It also recommends effective learning through hands-on minds-on learning approach.

#### ***Identification and Glossing of Content and Function Words in the Selected Languages of Sikkim***

A glossary involving function and content words available in school books of Bhutia, Lepcha, Limbu, Rai, Tamang and Sherpa languages have been developed. Glossing is done in Nepali language also, as Nepali is the regional language in the state. The purpose of the development of the glossary is to facilitate teachers and students in the teaching-learning activities in multi-lingual classroom. The glossary will also serve as a bridge material from mother tongue to the second or third language thereby promoting mother tongue education at the primary level. There are about 3000 words in the developed glossary and it has covered almost all the function and content words available in the primary stage.

#### ***Compilation of the Folktales of North-East Region for Reading Enhancement at the Elementary Level***

The folktales from the different languages were collected and translated into English. A CD filming children telling stories in Ao, Sumi, Ruangmei, Tangkhul, Bhutia, Lepcha and Mishong languages has been developed. These stories are meant for children at elementary level. The purpose of developing the CD is for wider dissemination. A total of 13 participants representing eight language communities i.e., Ao, Bhutia, Garo, Lepcha, Mishong, Ruangmei, Sumi and Tangkul language-speaking communities from the state of Assam, Manipur, Meghalaya, Nagaland and Sikkim. Altogether there are 171 folktales, of these 46 are from Sikkim, 45 from Manipur, 30 each from Assam and Nagaland and 20 from the Garo community of Meghalaya. The folktales are available in English as well as in the tribal language. The material as culturally local and familiar to the child, will enjoy reading in their mother tongue and they will get a chance to read the same story in English language also. Reading folktale of the other communities living around them will surely arouse their interest in



knowing other's folktales and subsequently will realise the similarities because of the similar topography and certain socio-historical similarities.

### **Contextualisation of 'Barkha Series' in the Scheduled Languages of North-East**

*Barkhaa* is a series of graded reading material developed by NCERT. The material aims at developing reading in Classes I and II. The material is developed in sync with children's innate cognitive capacities. The material is based on the understanding that 'if children read with meaning and pleasure from the start itself, they will learn to read quickly and will become successful readers'. NCERT considers that the series is a pedagogic tool which will help children of Classes I and II in learning reading and to arouse in them the urge to read more and more. All the four series of *Barkhaa*, (Levels I, II, III and IV), were translated for the young readers of Assamese, Bodo, Manipuri and Nepali languages. Stories in *Barkhaa* series revolve around a small event or a thing which the children of 4-5 years age group are experiencing, which are very interesting and exciting. The gradation of the four levels has been made by variation in syntax, number of words, and number and complexity of sentences. All the levels have ten stories each. The resource material for children will serve as a good source for enhancing literacy in children at the same time serve as a resource for effective implementation of mother tongue-based primary education.

### **Preparation of Annual Reports and Results Framework Document (RFD)**

The Annual Report is an important document of NCERT which is placed before the Executive Committee and General Council for approval. It is then sent to MHRD for placing before the Parliament. It gives a snapshot of the achievements of NCERT. The Annual Report 2013-14 was laid in the Parliament. The NCERT also prepared material for inclusion in the Annual Report of MHRD for 2014-15 based on the major activities and achievements.

Preparation of Results Framework Document (RFD) is an initiative taken up by Cabinet Secretariat to assess the performance of different departments of various ministries. Department of School Education and Literacy of the Ministry of Human Resource Development has asked all the autonomous bodies and institutes coming under its purview to send their respective RFDs. The RFD of NCERT included its vision, mission, objectives, functions and various activities. A brief report of the mid-term achievements of the RFD 2014-15 of NCERT was also prepared and submitted to Department of School Education and Literacy, MHRD.



## 4. Research Studies

Research being one of its principal functions, NCERT undertakes, promotes and coordinates educational research on various aspects of school education and teacher education. On the basis of the insights gleaned through the research studies and innovations carried out, NCERT plays a pivotal role in forming policies and programmes to bring about desirable changes in the educational system. In 2014-15, research studies conducted covered issues related to the curricular materials, examination practices, learning levels, implementation of various schemes, status of quality interventions, classroom process, technology, adolescence education, etc., encompassing a broad canvas spread across the entire country. The research studies completed have been given in detail in the ensuing section. Besides this, the Council is involved in the conduct of achievement surveys which looks into the achievement level of students at various stages and has finalised the Eighth All India School Education Survey (school census) which contains information in respect of access, enrolment, retention, infrastructural facilities, teachers, etc. ERIC funding by NCERT to researchers of various universities and colleges for undertaking research projects has promoted quality research works having relevance to the educational system and has helped in providing leadership in educational research in the country.

### ***A Study of Lateral Entry Students' Engagement with School***

The study was taken up with the objective to explore students' engagement (enrolled in age-appropriate grades, under RTE) with school particularly on the behavioural, emotional and cognitive dimensions. Data were collected from two



*Lateral entry students' of Government Senior Secondary School, Indira Nagar, Haldwani, District Nanital*



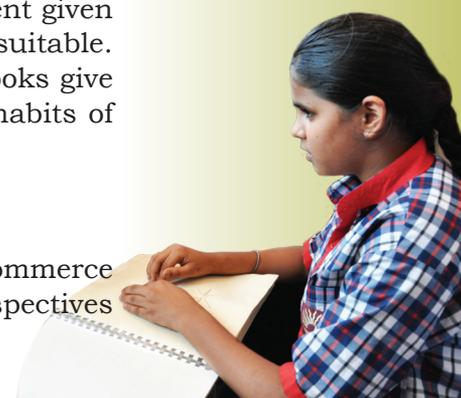
districts of each state viz., Udham Singh Nagar and Nainital from Uttarakhand and Khargone and Dhar from Madhya Pradesh by using semi-structured interview schedules for students and teachers and was analysed which revealed various factors that facilitated/impeded the engagement of the students. The study revealed that RTE Act, 2009 has truly ensured equal opportunities for all children. The successful implementation of another clause of the act 'pursuing and completing of elementary education on any grounds' [RTE, Chap. III, sec 8 (c)] requires students to feel bonded and identified with school. The school context also plays an influential role in students' engagement. Teachers' beliefs and attitudes towards the students are important factors in successful schooling. The study also revealed that the perception and beliefs of the students towards their teachers and peers have an effect on their bonding with the school. The findings indicated that students have positive beliefs and attitudes towards education which seem to be the major determining factor in behavioural and emotional engagement of students.

#### **Analysis of Textbooks and Other Curricular Material of States and UTs**

As approved by the MHRD, textbooks and workbooks developed by the states were analysed on the basis of the analysis tools developed with the involvement of textbook writing team members. This ensured uniformity of analysis. Accordingly, state-wise reports have been prepared. The focal points of analysis were – curriculum load, child-centredness and national concerns. Besides textbooks of English, Mathematics and Environmental Studies, language textbooks in the mother tongue were also analysed. During the year 2014-15, textbooks and workbooks for the states of Haryana, Madhya Pradesh, Gujarat, Rajasthan, Tamil Nadu, Odisha, Assam, Meghalaya, Manipur and some textbooks of West Bengal were analysed and state-wise reports have been generated. These reports will be shared with the textbook development teams of each state in the year 2015-16. It was found that the states have developed present textbook after NCF-2005 and follow child-centric and problem-solving approaches. The problem of curriculum load has also been considered and addressed to a large extent. The equality of gender and portrayal through visuals are also as per the National concerns. The physical quality of some of the textbooks like quality of paper, font size, colour, etc., needs to be reviewed in some states. The 'inclusion' has not been given due attention in the textbooks. There were differences in findings for each book and at different class levels in each state. In case of Odisha, some books show a good integration of themes while some other textbooks need to address this issue. In Tamil Nadu, it has been observed that for Class I English textbook, there is enough room for joyful and group learning but limited scope for feedback and in-built assessment. In case of Gujarat, teacher's Handbooks have been prepared. The content given is interesting and understandable and the language was found to be suitable. Spiral approach has been followed for development of the books. Books give a feeling of folk literature to some extent and nurture the reading habits of learners. Multi-lingual as a resource has been used in the books.

#### **Assessment of Social Science and Commerce Textbooks and Teaching-learning Resources**

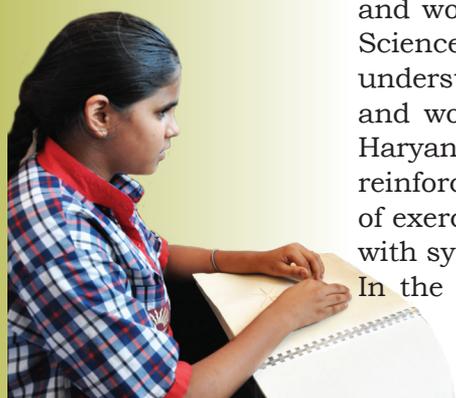
The study was undertaken to understand the social science and commerce teaching-learning processes. Efforts were made to understand perspectives



of teachers and students on syllabi and textbooks brought out by NCERT, based on *National Curriculum Framework*, 2005. The objectives of the study were to assess the learning levels of students in the subjects, the perception of teachers about the syllabi and textbooks and other classroom practices like use of textbooks, adaptation of pedagogical approaches, activity-based learning and evaluation processes. The study was undertaken in the states of Haryana and Uttarakhand. In this study, four Social Science textbooks of Class IX and X, three Business Studies textbooks of Class XI and XII, four Accountancy textbooks (Class XI and XII) and four Sociology textbooks were assessed. About 50 schools of two types surveyed were (i) State government schools – schools run and funded by state governments and run by private management but funded by state government; (ii) Schools run by Central government – Kendriya Vidyalayas and Navodaya Vidyalayas. Eight districts – four from each state were identified using stratified random sampling method. The tools used in the study were: (a) Classroom Observation Schedule; (b) Questionnaires for Social Science, Sociology and Commerce Teachers; (c) Focus Group Discussion Schedule for Teachers and Classes IX-XII students; (d) Achievement Tests for Students of Social Science for Class X and (e) Achievement Test in Business Studies, Accountancy and Sociology for Class XII; (f) School Profile. About 3000 students and 200 teachers of the sample schools in Uttarakhand and Haryana participated in the study. The study findings show that the social science classrooms reflect traditional teaching methods and use teacher-centred approaches. There are no hands-on activities, group works and projects carried out in the classrooms as suggested in NCERT textbooks and *NCF-2005*. Teachers and students interaction took place mainly during the question-answer sessions. It was found that there was no change in the pattern of questions asked in the board examinations, particularly in Haryana. Private guidebooks were used for setting question papers of board examinations, due to which schools were dissuaded from using NCERT textbooks. Social science syllabi were also found to be overburdening for the students. Most of the curricular suggested in *NCF-2005* has not percolated to the states.

#### ***Analysis of the Textbooks of Haryana***

The Haryana School Shiksha Pariyojna Parishad (HSSPP) took a major initiative through Quality Improvement Programme (QIP) for improving the quality of teaching-learning at the elementary level, in general and improving curricular material, in particular by identifying gaps in syllabi, textbooks and workbooks as these were developed at different points of time. The analysis was undertaken at NCERT through a capacity-building programme to make the process transparent and democratic in nature. The primary level textbooks and workbooks were analysed in the light of state syllabi of Environmental Science (EVS) subject for Classes III, IV and V. It also helped in developing an understanding on the learning indicators in various curricular areas. Textbooks and workbooks together form a complete package for teaching-learning in Haryana state. The workbooks are linked with the textbooks through content or reinforcement of skills. In case of English textbooks and workbooks, a variety of exercises/activities are given in the workbook, so it is found in conformity with syllabus. A wide scope is found to develop creativity and language skills. In the Environmental Science textbooks, it was found that the text in the



textbooks is more direct, narrative and information-based, particularly in Class IV and V, which needs to be improved. The text has also been dealt in disciplinary manner rather than an integrated way. This may be done thematically as suggested in syllabus. All the Mathematics textbooks introduce the themes with interesting and familiar situations. As per the analysis, the textbooks do not have inappropriate or difficult or abstract concepts. The textbooks for Hindi are as per syllabus but workbooks were not based on the textbook content. The analysis showed ample scope for learning beyond books and addressing concerns of environment.



**Gender Review of Textbooks from Bihar, Chhattisgarh, Jharkhand, Haryana, Rajasthan and Jammu and Kashmir**

The objectives of the study were to examine textbooks from a gender perspective, highlight positives in the textbooks and suggest ways of making the lessons gender inclusive. Evaluation tool for textbook analysis was utilised for the present task. Textbooks were analysed in a workshop mode and in-house. Analysis was based on application of both qualitative as well as quantitative techniques.

Elementary stage textbooks of Bihar, Jammu and Kashmir, Chhattisgarh and Haryana were analysed from the viewpoint of gender sensitivity. The analysis revealed that the books were gender inclusive and had a lot of activities that were designed for encouraging critical thinking and imagination among children. However, there were inter-state variations. In the textbooks of all states under study, a lot of child centred activities were highlighted. The portrayal of women and girls in content and visuals was found to be stereotypical in nature. The professions in which women were generally projected were teaching, nursing and engagement in household chores. In a limited



*Principal Investigator of the research interacting with the students and parents*



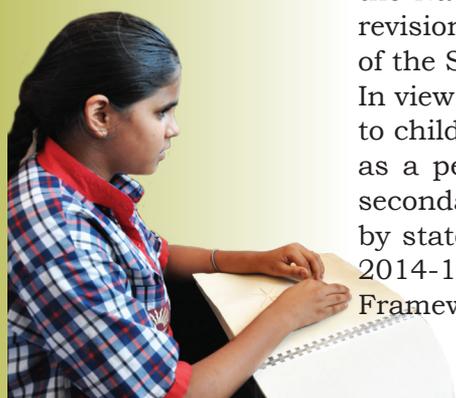
manner, mention was also made on women's involvement in new and emerging professions. The books also reflected sensitivity towards persons with special need. Environment sensitivity, contextualisation and human values also weave across several themes of the state textbooks. However, elements of stereotyping were found in the textbooks where woman were highlighted mainly in caring and sharing roles and as homemakers. The analysis revealed scope for improvement in the textbooks for making it more gender inclusive.

### ***Review of Learning Material Developed by States/UTs for Age Appropriate Admission of Out-of-School Children***

The children admitted in age appropriate classes have right to receive special training to be at par with others in the class (under chapter II, section 4 of the RTE Act). In this context, various States/UTs made efforts and MHRD entrusted the task to review the special training material developed by State/UT to the NCERT. To accomplish the task, a set of tools was developed for reviewing special training material developed for Out of School Children (OoSC). Various textual materials of 14 States/UTs namely, Bihar, Chandigarh, Gujarat, Jammu and Kashmir, Jharkhand, Karnataka, Maharashtra, Meghalaya, Mizoram, Nagaland, Odisha, Sikkim, Uttar Pradesh and West Bengal were reviewed. While developing criteria/tools for review, *NCF-2005* and learning indicators developed by NCERT were referred to. Subject-wise review of the textbooks was undertaken by subject experts from various institutions. Brief and comprehensive state-wise and subject-wise reports were prepared which included analysis of material in terms of curriculum load, use of language, national concern along with suggestions for improvement. The analysis show that curriculum load is on the higher side and to some extent is beyond child's comprehension, especially in states of Bihar and Mizoram. Physical appearance of the material is found to be suitable for the targeted group. However, it was noted that the font size of the text was not appropriate, too much textual information was given in the page with blurred visuals and the language was found to be incomprehensible. Even though gender parity is well taken care of in the textbooks, there is lack of content to develop life skills and good habits and content suitable for CWSN. The study suggested for making the material in the textbook more contextual and related to child's day-to-day experiences and perceptions.

### ***Study of Curriculum in the States: Analysis of Curricular Material and Capacity Building of State Curriculum Developers***

Curricular material used by students and teachers play a very important role in improving the quality of teaching-learning process. As a follow-up of the *National Curriculum Framework-2005*, seventeen States/UTs undertook revision of their state curricular material including syllabi and textbooks. Rest of the States/UTs adopted NCERT's syllabi and textbooks at different stages. In view of analysing curricular materials developed by the states with respect to child-centred pedagogy, assessment in-built in classroom processes, work as a pedagogic medium, multi-lingualism, etc., a curriculum study at the secondary stage in states which implement the curricular materials developed by states was undertaken in phase-wise manner. In the third phase i.e., in 2014-15, analysis of various curricular materials including State Curriculum Framework, syllabi and textbooks along with hand holding (capacity-building)

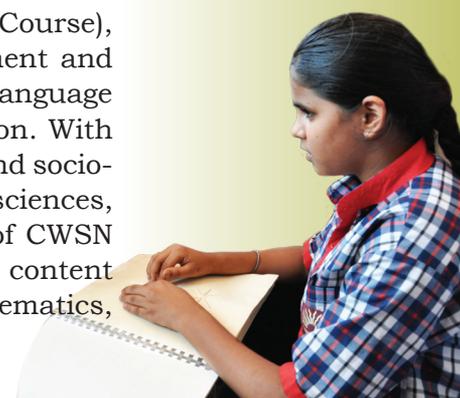


of state curriculum developers was done in eight States, viz., Manipur, Mizoram, Meghalaya, Andhra Pradesh, Telangana, Punjab, Madhya Pradesh and Odisha. The curriculum tools had two parts – the first part, which was on the curriculum reform process dealt with the philosophy and development/revision of curriculum, syllabus and curricular materials; while the second part was primarily concerned with the analysis of curricular materials of the specific subjects, viz., languages, social sciences, mathematics, science and arts education. Each of these tools were further divided into sections which included questions on general information about the curricular materials/textbook, content, pedagogy, social-political perspectives, assessment and physical aspects.

Findings of curriculum study revealed that although states have made efforts to revise their curricular material in consonance with the *NCF-2005*, yet the textbooks are information loaded with lack of constructivist approach, lack of perspectives on gender and inclusion sensitisation. There is a lot of scope for improvements in these textbooks with regard to incorporating concerns of gender, inclusion, local contexts, environment, etc. Critical pedagogy needs to be strengthened in these textbooks, especially in the social science textbooks. Exercises are generally given at the end of the chapters. It was suggested to include in-text questions, assignments, and project activities and improving illustrations.

***Analysis of the Curriculum, Syllabi, Textbooks and Other Resource Materials of the State of Punjab at the Secondary Level in the Light of NCF-2005 Perspective***

Analyses of the curriculum and related materials in science, mathematics, social sciences, language, etc., consisting of process-related concerns, content quality, pedagogy approach, social ethics, and visual aspects with handholding of state curriculum developers was conducted. The study aims at improving the process of transacting knowledge at secondary level and addressing the quality aspects embedded with equity concerns in the curriculum. Faculty from NCERT and SCERT, Punjab analysed 63 books from Hindi, Punjabi, and English languages, social sciences, mathematics and science of Class IX and X developed by the state of Punjab in consonance with PCF-2013. Some of the major findings with respect to Hindi language of Class IX were that it has motivated the students to acquire the values of gender equity, courage, environment, ill-effects of drug addiction, etc. The content has been directly linked with the daily life of students. The book also encourages students to develop critical thinking and apply problem-solving skills. However, the aspects related to peace, heritage and concern for children with special needs still need to be added to the content. It was found that in English (Main Course), linguistic and cultural diversity exists but gender, peace, environment and disability have not been touched. In English literature, it is found that language is comprehensible and there is content related to gender sensitisation. With regard to Punjabi textbook, it is observed that they fulfil educational and socio-cultural need of students and chapters are interdisciplinary. In social sciences, it is suggested that there is need to have content keeping in view of CWSN and questions should be rationalised. In science, it is observed that content provides scope for critical, analytical and creative thinking. In mathematics,



it is seen that introduction and summary is given well and learning by doing and factual methods are used.

### ***Curriculum Study for the States of Manipur and Tripura***

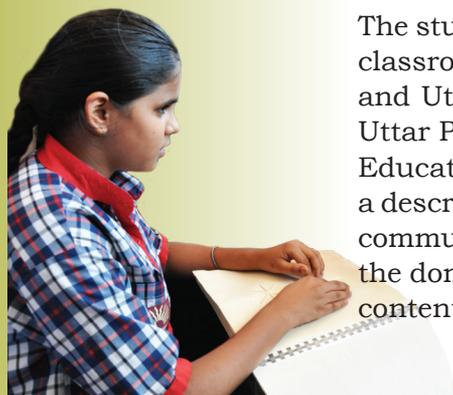
The curriculum analysis of the state of Manipur and Tripura were analysed by using the standard tools developed for curriculum analysis by RMSA Cell, NCERT. The state of Tripura has developed a State Curriculum Framework, 2005-06 on the basis of NCF-TSE, 2000 and the same SCF was revised in 2013-14 by incorporating the philosophies of NCF-2005. The textbooks used in the state at the time of analysis was pre-NCF-2005 books and therefore needs improvement in terms of the concerns mentioned in NCF-2005. Even though the contents in the books were found to be good, it lacks concerns on gender, multilingual perspectives, constructivists approach and inclusiveness. Availability and utilisation of multiple textbooks for various subjects was conceded to be a problem in the state as there is lack of uniformity in the information presented. The state of Manipur has developed textbooks at secondary level based on NCF-2005. The state published books at the secondary level in 2008-09, which were further revised in 2013-14. Serious attempts have been made to incorporate local culture and traditions wherever feasible. The analysis showed that the textbooks have a good knowledge base, however, needs improvement in terms of the gender, inclusiveness and contextualisation of the materials. The illustration in all the books needs to be improved.

### ***Evolving Classroom Process Framework at the Secondary Stage***

One of the important objectives of RMSA is improvement of classroom and school practices at the secondary stage to ensure equity and quality in educational outcomes especially in the government schools. The interventions in the secondary schools largely aim at this over-riding objective and hence, it is necessary to develop a research-based framework of the classroom processes at the secondary stage. For developing classroom process framework at the secondary stage, the study was conducted in the states, viz., Uttar Pradesh, Rajasthan and Meghalaya with the help of descriptors of classroom process (based on NCF-2005 perspectives) and focus group discussions with students, teachers and community members. Major findings of the study revealed that although space for students' voices and discussions in the classroom has been created by the teachers, yet dominance of teacher-centred pedagogy and textbook-based approach at the secondary stage act as obstructions to constructivist approach of teaching-learning processes.

### ***National Study on Comparison of Classroom Processes: A Case Study of Secondary Classrooms of Rajasthan and Uttar Pradesh***

The study was undertaken with the purpose of establishing benchmark on the classroom process in different contexts of secondary education in Rajasthan and Uttar Pradesh. The Rajasthan state uses the NCERT textbooks while in Uttar Pradesh, the textbook developed/prescribed by the Board of Secondary Education of the state is being used. Hence, the study was planned to provide a descriptive picture of classroom processes and interactions in diverse school/community contexts in the form of comparative case studies. The study reveals the dominance of traditional chalk and talk method in designing/ transacting content in the classroom. Presentation of new concepts and ideas is done by



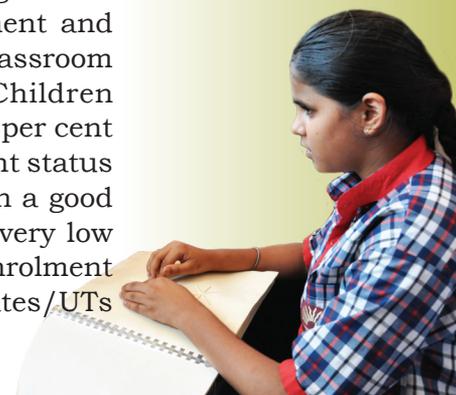
teachers mostly by citing examples. Sensitisation of learners towards CWSN is not getting adequate attention in classroom transaction processes. Students' participation has not been found as much as required. As far as science and mathematics teaching is concerned, students' participation is slightly lower than that of social science and language teaching.

### ***A Study on the Evolving Classroom Process Framework at the Secondary Stage for the State of Meghalaya***

The main objectives of the study were to arrive at a description of classroom processes based on observations in schools having different structural and contextual characteristics, to identify the extent to which the classroom processes reflect the concerns of *NCF*, RTE and CCE; to know and categorise the attitudes of teachers towards the factors associated with goals; support provided to them for teaching, in the form of materials and in evaluation; to relate teacher attitudinal categories with the classroom process categories; to measure the quantity of learning experiences in terms of 'opportunity time' provided to children in schools having different structural and contextual characteristics and to identify the interventions needed under RMSA with a view to influence classroom processes. The study adopted case study approach by using the following tools: classroom observation schedule; attitudinal scales of teachers; interview schedule for headmasters/principals and teachers and focus group discussion with students. The study reveals that the concept of constructivism is not followed in the classrooms as propagated in *NCF-2005*. However, the teachers do involve question-answers during teaching in the classroom. Eventually, it was also seen that most of the teachers taking secondary level classes were untrained and unaware of *NCF* and CCE proposed by NCERT. Besides, when asked about the autonomy of the learners in the classroom concerned, majority of teachers in East Khasi Hill district were not in support of the concept. According to them, teachers' role should not be taken away by giving full autonomy to the students in the classroom.

### ***Quality Interventions in Elementary Schools: Implementation of Quality Monitoring Programme in 100 Clusters of the Country***

The Programme Advisory Board of MHRD for SSA approved the study 'Implementation of Quality Monitoring Programme in 100 Clusters of the Country' in 2012-2013. The report of the study was prepared in 2014 and uploaded on NCERT website. The study was undertaken with the objectives of finding out the status of quality interventions in schools, enabling the functionaries at different levels (sub-district and district) to provide feedback for improvement of teaching and learning process and to study preparedness and effectiveness of CRCs, BRCs and DIETs for quality monitoring programme. The findings of the study relate to several dimensions like Enrolment and Attendance, Textbook Distribution and Completion of Syllabus, Classroom Process and Teacher Effectiveness, Learning Assessment and Children Achievement. Students' attendance is a matter of concern as only 55 per cent of the States/UTs reported good attendance of students. The enrolment status of Out of School Children (OoSC) in age-appropriate classes is not in a good state. The majority of schools did not enrol OoSC. Others reported very low enrolment (one to four children per school) of OoSC. While overall enrolment of Children with Special Needs (CWSN) in schools of different States/UTs



varies from 1 to 6, in most of the schools it is 0 to 1 per school. Most of the States/UTs distributed textbooks within one week. The number of States/UTs showing 'good achievement' is lesser than the number of States/UTs showing 'need improvement' in respect of all Classes (I to VIII) and all subjects, namely, Language, Mathematics and Environmental Studies. More than three-fourth of the teachers in two-third of the States/UTs have undergone in-service training. The remaining one-third of the States/UTs has provided training to less than 50 per cent teachers. All States/UTs, except a few, have constituted School Management Committees in their schools and most of them have been given training.

#### ***National Achievement Survey – Class III (Cycle-4)***

NCERT has conducted three cycles of Achievement Survey at the end of Class III. Considerable inputs on variety of areas have been provided country-wide under the flagship programme. The findings of Cycle-1, Cycle-2 and Cycle-3 studies have already been shared with National Resource Group (NRG), Joint Review Mission (JRM) and strategic committee on assessment under *Sarva Shiksha Abhiyan* and at various national forums. Considerable improvement in conducting the achievement survey took place in Cycle-3 wherein Item Response Theory (IRT) method was used in test development and analysis of data.

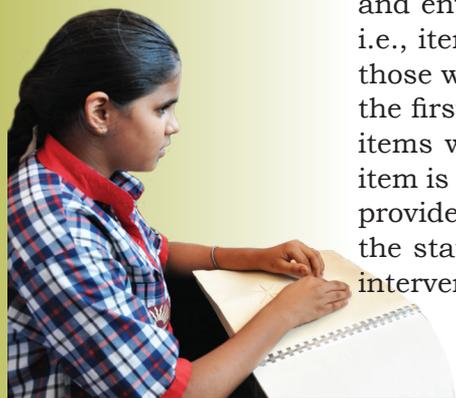
For the cycle-4, the development of items in two subjects i.e., language and mathematics vis-a-vis the learning indicators have been completed. The items developed were field triedout in the States/UTs. Also a cadre of professional field investigators has been developed in each state to conduct the survey.

#### ***National Achievement Survey – Class V (Cycle-4)***

National Achievement Survey is conducted at the end of Class V (Cycle-4) in all States/UTs (except Lakshadweep) with the purpose to study achievement level of Class V students in language, mathematics and environmental science. The MHRD approved project National Achievement Survey Class V (Cycle-4) was administered in 34 States/UTs and the data from all the states/UTs have been received. Data batching, manual verification of records, data entry and cleaning of data has been carried out. The analysis work is in progress. International experts from ACER, Australia are supporting in the data analysis.

#### ***Subject-wise Report (Learning Gaps in Language, Mathematics and Environmental Studies (EVS) based on National Achievement Survey – Class V (Cycle-3) Data***

A total of 35 reports (one National and thirty-four State/UT reports) have been developed. In these reports, item-wise performance of students in National Achievement Survey Class V (Cycle-3) in reading, comprehension, mathematics and environmental studies is reported. Items are classified into two groups, i.e., items those were responded correctly by less than 50 percent and items those were responded correctly by 50 percent or more students. The items in the first group were tagged as 'What students can't do' and the second group items were as 'What students can do'. Besides, distracter analysis for each item is also provided for all items tested in all the three subjects. The analysis provides an insight about how students are doing in the subject tested across the states/UTs. This will help in providing feedback in general for planning interventions at national/state level.



### **National Achievement Survey-Class VIII (Cycle- 4)**

The year 2014-15 of the project was devoted to development of tools. For this, assessment framework in different subjects, namely, language, mathematics, science and social science have been developed and common core contents have been identified. On the basis of it, the test items in different subjects were constructed, vetted and included in four test forms in each subject. Further, these tests were translated in various Indian languages for piloting. The tests have been piloted in 17 states.

### **Eighth All India School Education Survey**

NCERT periodically conducts All India School Education Survey (school census) in which information in respect of access, enrolment, retention, infrastructural facilities, teachers, etc., from all recognised schools is collected for all the States and UTs. The eighth All India School Education Survey (8th AISES), is conducted with reference date September 30, 2009 and the provisional (flash) statistics report is available at link <http://aises.nic.in/surveyoutputs>. The survey has been conducted in about 65,000 villages, 5,100 towns/cities, 13 lakh schools in all States/UTs in the country.

<b>Eighth All India School Education Survey (AISES) – Flash Statistics</b>			
	7th AISES (in lakh)	8th AISES (in lakh)	Growth (%)
Total No. of Schools	10.31	13.07	26.77
Enrolment : Classes I-XII	2014.57	2289.94	13.67
Enrolment of Girls: Classes I-XII	913.64	1088.27	19.12
Total No. of Teachers	55.30	71.82	29.86

The process of data entry and data uploading of main schedules of 8th AISES have been freezed at the end of March, 2014 for the all the states. All states have completed data entry and data uploading of main schedules of 8th AISES, except seven states, namely, Assam, Meghalaya, Jharkhand, Madhya Pradesh, Gujarat, Maharashtra and Karnataka.

The National Village/Urban (NV) and State Village/Urban (SV) reports/tables [i.e., 102 NV reports and 102 × 35 SV reports] pertaining to Village Information Form (VIF)/Urban Information Form(UIF) Schedules have been verified at NCERT level and sent to all States/UTs for their authentication. Some states have communicated their approval about the state reports. The National Schools (NS) and State Schools (SS) reports/tables pertaining to SIF-1, SIF-2 and CIF schedules for national as well as states [i.e., 559 National (NS) reports and 559 × 35 States/UTs (SS) reports] have been generated and checking of tables is in process. These reports will be verified and authenticated by the respective States/UTs for consistency. The Eighth All India School Education Survey (AISES) is useful for monitoring and assessing the impact of SSA, to provide universal access, enrolment, retention and improvement of quality in elementary education and planning for universalisation of secondary education. The unique features of the 8th AISES include information on school facilities at habitation level, enrolment of disabled students by type and degree of disability, stream-wise enrolment and teachers in vocational courses at +2 level apart from many other indicators.



### ***Assessment of Learning Levels of Students at the Secondary Stage (Class-X) under RMSA***

The MHRD-funded study envisages assessing the learning levels of students of Class X in the areas of English, Mathematics, Science, Social Sciences and one modern Indian language in the country.

The activities undertaken during the year were translation of achievements tests in 16 Indian languages, tryout of achievement tests in 18 States in as many modern Indian languages, analysis of tryout data and finalisation of achievement tests for main survey, development of School Questionnaire (SQ), Teacher Questionnaire (TQ), Pupil Questionnaire (PQ), Field Notes (FN) and Guidelines for Main Survey Activities of NAS (Class X), training of institutional coordinators and pedagogical coordinators in the conduct of NAS, development of norms of expenditure for printing and main survey activities of NAS and administration of survey tools in 33 states/UTs/boards.

### ***Implementation of the ICT@Schools Scheme in the Kendriya Vidyalayas***

A survey was conducted with the objective of evaluating the implementation of the ICT@Schools Scheme in the Kendriya Vidyalayas (KVs) and accessing the utilisation of the e-classroom project and its impact on students learning and teaching in 124 KVs. A mixed method, comprising the base line survey, case study, interviews and classroom observation was adopted to obtain valid and reliable responses from principal, subject teachers, ICT teachers, students etc. Randomly 50 KVs, 52 principals, 87 ICT teachers, 624 subject teachers and 2097 students (40 per cent of the population) were selected for in-depth study. The study reveals that 96 per cent of the e-classrooms are in functional condition wherein, 98 per cent of the interactive boards, 92 per cent of the computers, 99.11 per cent of the Notepads and visualisers are in functional condition. Most of the teachers use ICT for developing teaching resources (78 per cent), creating question papers (82 per cent), accessing online data (59 per cent),



*Investigators interacting with the teachers during the conduct of the study 'Evaluation of ICT @ Schools Scheme in KVS'*

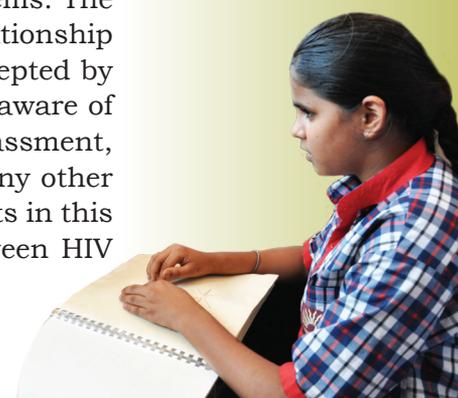
conferencing with students and parents (57 per cent), collaborating through social networking (45 per cent) and developing online activities, courses, teacher forum, seminar etc. (43 per cent). However, it was found that 50 per cent of the subject teachers and 38 per cent of the principals lack training in ICT and its integration with classroom teaching. The study revealed the need for continuous professional training through face-to-face and distance mode for the effective implementation of ICT @ Schools Scheme.

***A Study on Availability and Utilisation of Laboratory Facility for Teaching-learning Science and its Effect on Achievement in Science at the Secondary Level in the State of Rajasthan and Madhya Pradesh***

The study was planned to provide a descriptive picture of availability and utilisation of laboratory facility for teaching-learning science and its effect on achievement in science at secondary level in the states. Major findings of the study revealed that availability of laboratory facilities and also of science kits have been improved in the states with the support provided under RMSA. However, utilisation of these facilities varies from state to state. In Rajasthan, three districts, namely, Ajmer, Jaipur and Nagaur were selected for the study. The study reveals that there were no separate classes for practical works. There was no separate period allocated for laboratory work in the time table of the school. Laboratory equipment, chemical, glassware, etc., were kept in the respective almirah and kept locked. There was no evidence of regular use of these in the schools of Ajmer city. Laboratory kits supplied under RMSA were also found lying idle without being used. Students' enrolment in Class IX and X was high which deteriorated learning outcomes. In Madhya Pradesh, effective utilisation of laboratory facilities in science is reported.

***Impact of Role-play on Awareness, Attitude and Behaviour about Issues of Adolescence among Students of Maharashtra***

Under National Population Education Project (NPEP), many co-curricular activities were organised throughout the country. Among these, national role-play competition, an important activity was conducted at various levels in the state and also at the regional and national level. The objective of the role-play competition was to create awareness and develop life skills on culturally sensitive adolescence-related issues. The objectives of the study were to assess the impact of role-play activity in promoting awareness among secondary school students on various issues of adolescence education, to get information on the effectiveness of role-plays as a teaching strategy in changing behaviour of the students, and to study the change in attitude of the students due to the exposure to the role-play activities on the adolescence-related problems. The study reveals that the role-play activities helped in enhancing the relationship among students and also with parents. Domestic violence is not accepted by most of the students. Role-play helps the students in making them aware of the gender issues and they were of the opinion in case of sexual harassment, it needs to be confronted and should not be ignored out of fear or any other reason. The role-play activities further boosted the attitude of students in this regard. A large number of students understood the difference between HIV and AIDs.



***Role and Performance of School Management and Development Committees in Rural Meghalaya in the Context of Universalisation of Secondary Education: A Case Study***

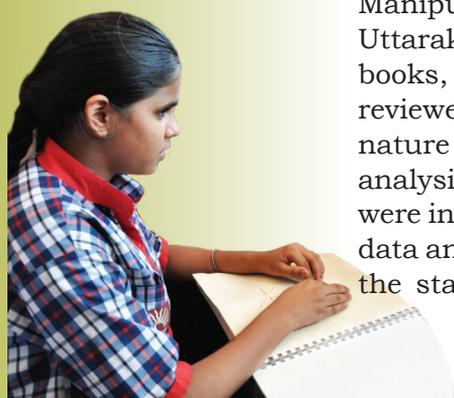
The study was conducted with the objectives to make an in-depth case study of School Management and Development Committees (SMDCs) of rural Meghalaya, to study the issues associated with the functioning of SMDCs in attaining the goal of Universalisation of Secondary Education (USE), and to suggest measures to enhance the performance of SMDCs so as to attain the goal of USE. Four secondary schools of rural Meghalaya were the samples for the study. The data were collected by employing the tools viz., semi-structured interview schedules for the parents and teacher members of SMDC; information schedule and through Focus Group Discussions (FGDs). The study revealed that SMDCs have not been formed in many of the secondary schools, SMDC meetings were not held regularly in many schools, the members of SMDC did not attend the meetings, the parents and members of SMDC rarely visited the schools, and majority of the members of SMDC were not aware about their roles and responsibilities.

***Assessment and Examination Practices at the Secondary Stage***

Reflection on the assessment practices carried out at Secondary Stage of school education in the North-Eastern Region pointed out the misconception that exist in the concept of CCE, as in many states, the introduction of internal-based assessment is seen as the introduction of CCE. In the state of Manipur, the scheme was introduced in 1993 as a try-out in four districts, with 25 weekly tests for every subject in one academic year. The tryout was not effective and teachers were reluctant to take up the scheme, but still the scheme was made mandatory from the following year with several modifications. Similarly in Assam, it is stated that CCE has been introduced since 1996. In Nagaland, CCE has been offered in all the subjects offered by the Board. However, it was found that the reference to CCE in these states was in the context of the 20 per cent marks allocated under the internal assessment. The study brought out the suggestions that there is a need to review the question papers set by the various state educational boards and its correlation to the new approach and methodology in each subject area following the *NCF-2005* and there should be more flexibility and comprehensiveness in the student's choice over the subjects.

***Review of the Continuous and Comprehensive Evaluation (CCE) Programme of the States and UTs***

The CCE programmes of 10 states, namely, Odisha, Mizoram, Meghalaya, Manipur, Nagaland, Madhya Pradesh, Gujarat, Chhattisgarh, Karnataka and Uttarakhand have been reviewed. The CCE material which included the source books, CCE schemes, guidelines to manuals and modules for teachers were reviewed on the basis of the review template. The study being qualitative in nature required data collection on the item identified in the template and the analysis was carried out at the RIEs where members from the concerned states were involved in the process. The concerned RIEs had sent state-wise analysed data and an overall report was prepared at the national level which highlighted the status of CCE, strengths, gaps and suggestions for improvement. The



report has been shared with MHRD and the concerned states. Most of the states theoretically elucidated continuous and comprehensive evaluation, and formative and summative assessments. Assessment on problem-solving questions is also sought by all to provide a comprehensive picture of a child's learning progress. Guidelines for the teachers include as to on what kind of information needs to be recorded about children's learning progress. Learning Indicators and Learning Outcomes were either found to be missing or are not clearly spelt out. The recording and reporting on formative and summative assessments emphasising the cumulative performance of children in grades/percentiles leave little scope for assessment for learning or assessment during the formative period.

### **Continuous and Comprehensive Evaluation (CCE)**

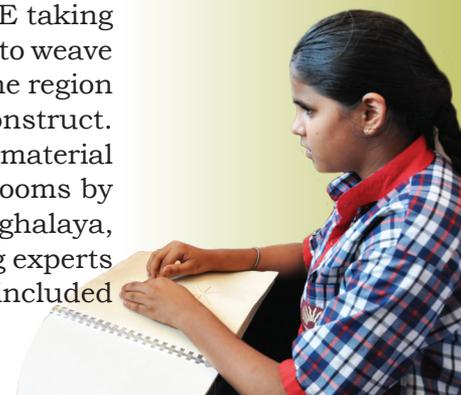
*CCE can function as a powerful instrument in ensuring learning of all children as assessment during teaching-learning process would provide necessary and timely feedback for further improvement. It would encourage all to focus on child's progress compared to her/his own past performance over time. This mode of assessment is considered adequate for assessment of students' learning because it is all-inclusive, cumulative and diagnostic-oriented that can be used to improve the progress of learners and develop self-awareness amongst learners so as to progress before it is too late. The results obtained and the feedback of the assessment turns out to be more valid, reliable and more indicative of the holistic ability of the learner.*

### **Impact of CCE on Teaching-learning of Science and Mathematics at Elementary Level**

The study was conducted with the objectives to explore the Continuous and Comprehensive Evaluation (CCE) practices in mathematics and science classroom at the elementary school level and to study the impact of CCE in teaching-learning of mathematics and science at the elementary school level. The data were collected from 60 students of Class VII and twelve teachers of three schools, selected randomly from East Khasi Hill through interview, group discussion and observation. The overall result shows that efforts have been made to make evaluation continuous and comprehensive in the sampled schools. But there is a need to work on it further in order to achieve the objectives of CCE in the true spirit. The data also shows that majority of teachers claim that assessment in their classroom is continuous and comprehensive.

### **Documentation of Good Practices of CCE in Elementary Schools of North-Eastern Region**

The study was envisaged with a view to map the good practices of CCE taking place at different schools of the NE region in their specific contexts and to weave them together to showcase the contextual reality to other schools of the region and the country, the premise of which is that CCE is not a practical construct. The study was also taken up with an understanding that the exemplar material on CCE, developed by NCERT, would have seeped down to the classrooms by that time. The schools were identified in some of the states such as Meghalaya, Tripura and Assam in consultation with the state authorities involving experts from the institute. The data were collected from these schools. This included



classroom observation, interaction with students, teachers and Head teachers and also the overall observation of the activities of the school. At the same time, the respective state CCE guidelines were analysed and corroborated with the observed data. The results emerged out of analysis and corroboration of data were quite disappointing as the activities practiced by schools in the name of examination and assessment was not even in tune with a sound traditional examination system, with no exception. The understanding of CCE philosophy could not be seen in the activities of school and classrooms observed. This is the reason that good practices of CCE could not be showcased. The field reality also gave an impression that schools of North-Eastern Region might need some more time, rigorous training and other concerted efforts to let CCE philosophy percolate down further to the schools.

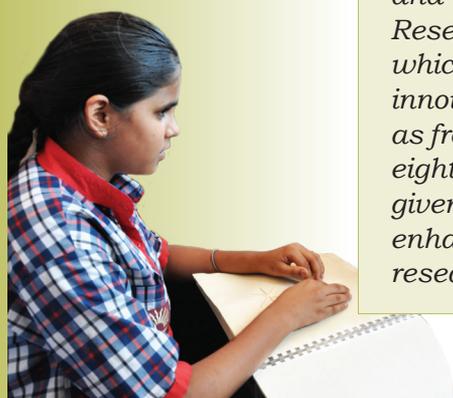
### **RESEARCH PROJECTS FUNDED BY ERIC**

#### ***A Study of Dyscalculic Primary School Children from Salem District and Evaluation of Applicability of Innovative Strategies as Remedial Measures***

Dyscalculia refers to innate difficulty in learning or comprehending arithmetic and its application. This research explored mathematics learning difficulties among primary school children. Students from fifth grade studying in government, government-aided, and private schools from Salem district participated in the study. The study was conducted in three phases. The first and second phases involved administering and screening mathematics achievement tests, while the third phase examined the suitability of remedial intervention programmes. Based on the screening tests, fifty students were identified having learning difficulties in mathematics. The study revealed that boys performed better in cognition, visual-spatial, and motor dimensions, while the girls were better in numerical, sequential, and language dimension and that dyscalculia is widespread. To meet the learning requirements of dyscalculic pupil, suitable interventions involving specially designed teaching-learning materials and orientation and in-service intervention programme for teachers need to be developed. (*Principal Investigator: T. Nagavalli, Sri Sarda College of Education, Salem, Tamil Nadu.*)

#### ***Educational Research and Innovations Committee (ERIC)***

*In addition to promoting educational research in its institutional networking, the NCERT has been taking measures to create and sustain interest in educational research amongst the researchers, both within the NCERT and outside. To this end, a Standing Committee known as Educational Research and Innovations Committee (ERIC) was set up in the year 1974 which scrutinise and recommend grants to proposals related to research and innovation projects received from the constituent units of the NCERT as well as from outside agencies and individuals. Under ERIC, in the year 2014-15, eight research studies have been completed. ERIC funding and guidance given for the research studies has helped in promoting quality in research, enhancing expertise in conduct of research activities and dissemination of research findings which are relevant to the educational system.*



***Effectiveness of Computer Assisted Language Learning and Testing in the Context of Learning English as a Second Language at Class VIII***

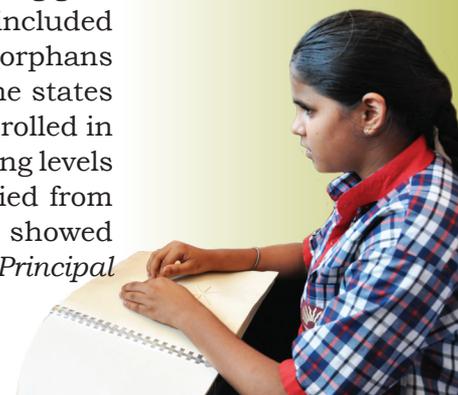
Computer as a tool of learning has been found to raise the learning curves of school subjects and Computer Assisted Learning (CAL) has been proved to be an effective supplement to classroom teaching. This research aimed at developing syllabus-based computer software package for Class VIII students for teaching English as a second language. The effectiveness of the Computer Assisted Language Learning (CALL) package was established by the results of the pre-test and post-test single group design in selected schools. The findings highlighted the facilitating role of CALL package in acquisition of writing skill. Further, among the different modes of CALL, the tutorial mode was found to be least effective, followed by drill and practice mode and the simulation was found to be most effective. The study established the need for widespread utilisation of computers in schools to facilitate acquisition of writing skills among the students. *(Principal Investigator: N. Balasubramanian, Bharathiar University, Coimbatore, Tamil Nadu).*

***Strategies Adopted for Enrolling Girls in Kasturba Gandhi Balika Vidyalayas Managed by Different Agencies in Andhra Pradesh, Bihar and Gujarat: An Exploratory Study***

The main objectives of the study were to examine the different mobilisation strategies used for enrolling girls from marginalised groups in KGBVs run by different managements, study the follow-up procedure adopted, and to analyse whether the selection procedure adopted in enrolling covers the most needy and educationally deprived girls as per the RTE Act, 2009 norms.

The study was mainly qualitative in nature. It focused on examining KGBVs run by different managements in the states of Gujarat, Andhra Pradesh and Bihar. In each state, two KGBVs run by different agencies were studied in-depth to examine the strategies adopted for enrolling girls from the marginalised sections of society. In each KGBV, focus group discussions were organised with parents, community members, teachers and the beneficiaries of the scheme. Interview schedules were conducted with senior level state officials to know the procedures adopted for enrolling girls. Structured interview schedules were also canvassed to teachers, wardens and girls to know in detail their perception about different mobilisation strategies and barriers in enrolment of girls.

The findings highlighted that multiple strategies were adopted by states for enrolling girls. Some of the popular strategies adopted were using local media, door to door campaign, inter-personal contact of teachers with parents and community members, pro-active role of state officials and *panchayat* members. There was no documentation of procedures related to enrolling girls from 'hard to reach' groups. In all the states visited, the enrolments included girls from marginalised community, CWSN girls, girls of single parent, orphans and victims of domestic violence. The demand for enrolment in all the states exceeded the capacity of KGBVs. The bridging mechanism for girls enrolled in KGBV varied from state to state. Girls were grouped according to learning levels in different subjects for entry into Class VI. The bridging period varied from three to nine months as per the needs of the girls. The study result showed that the scheme had acquired community support and popularity. *(Principal Investigator: Gouri Srivasatava, DGS, NCERT).*



***A Study of the Pre-service Secondary Teacher Education Programme in Jammu Region for Emerging Divergent Educational Contexts: Perspectives, Practices and Prospects***

The NCF-2005 places certain demands and expectations from the teachers which need to be addressed by both initial and continuing teacher education. The study examined the relevance of pre-service teacher education programme and its relevance to the emerging educational contexts in the state of Jammu and Kashmir. The sample consisted of teachers from eight colleges (from five districts) affiliated to University of Jammu employing purposive sampling. The data was collected through survey, questionnaire and focus group discussion. Results revealed that theoretically the curriculum for educating the future educators seems to be a balanced one, but the synchronisation of theory into practice is yet to be developed. Efforts need to be made to regularise and organise the in-service teacher training programmes for the teachers of secondary schools in order to adapt to global educational standards and associated employment market, amidst the dynamic global perspective of education. *(Principal Investigator: R. R. Sharma, University of Jammu, Jammu and Kashmir)*

***Career Aspirations for Girls in Rural and Urban vis-à-vis Vocational Education***

The *National Policy of Education*, 1986 emphasised on increasing access to vocational education among the girls. However, even after three decades, there has been no significant achievement in this direction. The enrolment statistics continue to reflect strong gender bias in vocational courses. This qualitative study attempted to identify the aspirations of parents, teachers and girls for becoming career women and study them in relation to their participation in vocational education as compared to that of the boys. The sample consisted of girl students and their respective parents from the chosen schools of Chandigarh and Goa. The results revealed that most of the respondents viewed vocational courses from employment perspective. They further added that current vocational courses are not suitable for girls. Hence, major restructuring in the current vocational courses is required which can accommodate girls also and add to their employment perspective in the job market. The findings of the study have wider implications for increasing the participation of girls in vocational courses, especially in rural areas. *(Principal Investigator: Poonam Agrawal, IRD, NCERT)*.

***A Study on Engagement of Students Enrolled through Lateral Entry under the Provisions of RTE Act, 2009***

The Right of Children to Free and Compulsory Education Act, 2009 has succeeded in ensuring enrolment for all children in the age of 6-14 years, but it does not ensure their retention and completion of school. This study attempted to identify factors influencing engagement of students who have been admitted to grades appropriate to their age in the schools in the light of RTE Act, 2009. The sample consisted of 380 students from Classes III to VIII admitted through age-appropriate admission in government schools in the states of Uttarakhand and Madhya Pradesh. The findings revealed that engagement of students in the schools was crucial in preventing drop-outs



and facilitating completion of the course. Further, the psychological sense of belongingness was found to be an important factor in participation, school engagement, and drop-out. The findings have implication for designing suitable intervention programmes to facilitate learning and retention in school. *(Principal Investigators: S. Chakraborty and Deepmala, DEPFE, NCERT).*

***Development of an Assessment Tool and Integrated Management Protocol for Children with Developmental Coordination Disorder***

Developmental Coordination Disorder (DCD) is an umbrella term for plethora of childhood disabilities. This study aimed to develop an assessment tool to diagnose DCD. Using a three round Delphi process, items were generated for each of the domains identified from the literature. The tool was tested on 127 children and domains were identified and were reduced with Rasch analysis using Winsteps. Further, the children were given a remediation programme that was embedded in the school curriculum. The tool items were validated against items on an existing tool of motor proficiency viz., Movement Assessment Battery for Children (MABC) and were found to be valid (0.55-0.9). However, there was no measurable improvement in academic performance or BMI after six weeks of intervention probably due to time constraint. The tool developed from the study is a valid and reliable tool to assess the capacity component of DCD and it can be used in conjunction with Development Coordination Disorder Questionnaire (DCDQ) to identify children with DCD. *(Principal Investigator: V. Ganasan, Takshila Junior College, Ujjain, Madhya Pradesh)*

***Enhancing Performance of Disadvantaged Pupils through Motivation***

The objective of the study was to enumerate the role of motivation in human learning and performance among the socially disadvantaged group of students. The sample for this exploratory study consisted of 320 students of Classes IX to XII randomly selected from different government schools of the Bhopal city. The findings showed that the gender exercised significant impact on emotional dimension. Further, students of different grades differed in the display of emotional traits. For example, pupil of Grade X feel more responsible and display greater concern towards their career. The results further revealed that students from disadvantaged groups showed lower motivational trait. Students from disadvantaged group lack sharing from parents, experienced less support and expressed low desire to excel in life compared to advantaged group, contributing to their low motivation. However, the girls were found to display higher motivation owing to their willingness to achieve more and perform better in future. *(Principal Investigator: K.N. Tripathi, Barkatullah University, Bhopal, Madhya Pradesh).*

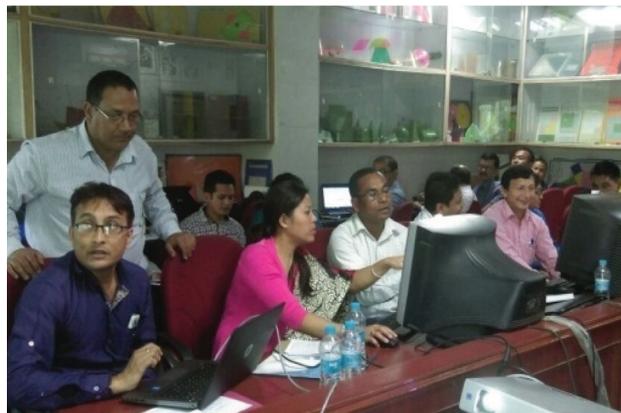


## 5. Training Programmes

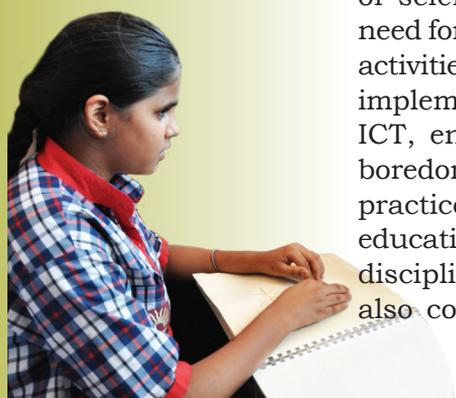
Large gap exist between the curricular pronouncements and the ground realities, and to this end, capacity-building programmes for the stakeholders of education plays an imperative role. Constituents of the Council take up training programmes aiming at updating knowledge in the subject areas, dealing with methodological and pedagogical concerns, continuous assessment, inclusive education and imparting appropriate technology and pedagogic practices in the classrooms. The training programmes equip stakeholders with relevant skills, ability to plan, organise, manage and evaluate classes and also for sensitising towards social issues and concerns, thereby providing continuous professional development. There are programmes that take the form of regular training courses in the areas of guidance and counselling, action research and also in specialised areas, for instance, in environmental education, early school mathematics, activity-based science and mathematics, application of mathematics in economics, art integrated learning, open source tools, ICT and laboratory kits catering to the needs of stakeholders in education across the country.

### DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

With a view of equipping teachers, training programmes were conducted on activity-based science and mathematics teaching, integration of ICT in teaching-learning of science and mathematics and for promoting environment education. The programmes helped in orienting the participants about use of kits for effective transaction of science and mathematics, need for and ways of integrating activities in classroom teaching, implementing CCE, integrating ICT, enhancing children's participation and making it free from fear and boredom. Envisaging incorporation of environmental concerns in the classroom practices, teachers were oriented on aims and objectives of environmental education, infusing environmental concerns in the teaching-learning of different disciplinary subjects, environmental issues etc. Training programmes were also conducted for teachers, particularly belonging to SC/ST concentrated



*Hands-on Training of Teachers of North-Eastern States on Intergration of ICT in Teaching-Learning of Science and Mathematics*

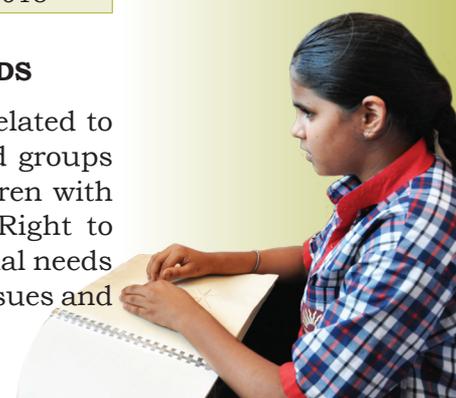


areas on activity-based science and mathematics teaching. Teachers were equipped to perform their assigned roles more scientifically and expand their horizons of scientific knowledge. Training for teachers working in rural areas on activity-based mathematics focused on mathematical logic, mensuration, probability, recreational mathematics, application of mathematics etc. The training programmes were activity-oriented and the participants gained a positive outlook towards the activity-based mathematical teaching. The training programme on integration of ICT in teaching-learning of science and mathematics provided insight to the teachers regarding the endless possibilities of enhancing classroom transaction by integrating ICT to make teaching-learning process more interactive, hands-on and interesting.

S. No.	Title of the Programme	Venue and Date
1.	Training of Master Trainers working in SC/ST Concentrated Areas for Activity Based Science Teaching at Upper Primary Stage	NIE, New Delhi 10-30 June 2014
2.	Training of Master Trainers working in SC/ST Concentrated Areas for Activity Based Mathematics Teaching at Upper Primary Stage	NIE, New Delhi 10-30 June 2014
3.	Hands-on Training of Teachers of North- Eastern States on Integration of ICT in Teaching-Learning of Science and Mathematics	NIE, New Delhi 16-20 March 2015
4.	Training Programme of Teachers Working in Rural Areas on Activity Based Mathematics Teaching at Upper Primary and Secondary Stage	NIE, New Delhi 23-27 February 2015
5.	Orientation on Environment Education for Teachers Teaching at Elementary and Secondary Stages in SC Dominated Areas	NIE, New Delhi 26-28 March 2015
6.	Improvement of Science and Mathematics Education at Upper Primary Level	NIE, New Delhi 24-28 November 2014 RIE, Bhopal 2-6 February 2015 RIE, Ajmer 9-13 February 2015 RIE, Bhubaneswar 16-20 February 2015 RIE, Mysore 23-27 February 2015 NERIE, Shillong 23-27 February 2015

### DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

The thrust areas of training were delineating issues and problems related to education of children from scheduled castes and other marginalised groups for improving the quality of education, facilitating inclusion of children with special needs in main stream education and implementation of Right to Education Act, 2009 for increasing the coverage of children with special needs under all programmes/schemes. Master trainers were sensitised on issues and



problems related to education of children from scheduled castes and other marginalised group for improving the quality of education of children. Key Resource Persons (KRPs) of northern and southern States/UTs were oriented on the necessity of Individualised Education Programmes (IEPs) for children with special needs and training was imparted to develop the capacity of KRPs in planning and preparing IEPs in school subject areas for children with special needs in inclusive classroom setups. The KRPs/Secretaries of School Management Committee (SMC) were oriented towards Right to Education, role, formation and constitution of SMC, inclusive education, education of children from socially disadvantaged groups, education of socially disadvantaged girls and school development plans. The role of SMC members to promote inclusive education in their schools was also covered during the training programmes. Based on the need assessment carried out, training was given to state team coordinators and DIET faculty members from the states of Uttarakhand, Rajasthan and Gujarat to develop knowledge and competencies for implementation of the RTE Act from the perspective of CWSN. A regional consultative-cum-capacity-building workshop was also organised for non-Hindi speaking states, namely, Karnataka, Tamil Nadu, Kerala, Andhra Pradesh, Pudducherry, Maharashtra, Odisha, Lakshadweep, Andaman and Nicobar, Goa, West Bengal, Daman and Diu, and Dadra and Nagar Haveli. The focus of the workshop was on promoting collaboration between the regular and the special teachers, use of ICT and theatre for promoting social inclusion, making IEP's and linking IEP with academic goals, linking life skills with daily living skills, understanding inclusion beyond disabilities and in terms of socio-economic disadvantaged groups, minorities and gender. The participants prepared an action plan linking the workshop learning with their day-to-day professional responsibilities. Three roll-out workshops were organised for preparing master trainers for planning training programmes based on the contents of the handbook on Including Children with Special Needs At Primary Stage. The training programme enabled the state teams to collectively compile a presentation based on their understanding developed. The master trainers are expected to provide further training to teachers in their own states to promote inclusion of children with special needs in regular classrooms.

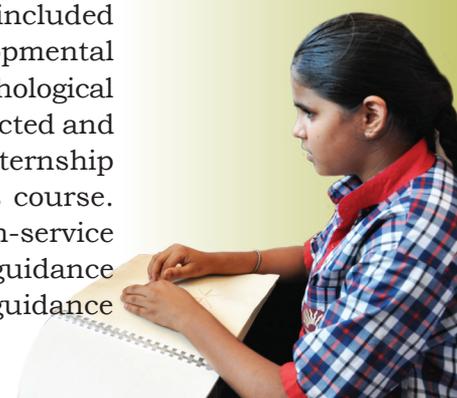
S. No.	Title of the Programme	Venue and Date
1.	Orientation Programmes for Key Resource Persons (KRPs) of States/UTs on Development of Individualised Education Programme (IEP) in School Subject Areas (Hindi-speaking States/UTs)	NIE, New Delhi 12-14 November 2014
2.	Orientation Programmes for Master Trainers for enhancing quality of education at elementary level schools. <ul style="list-style-type: none"> <li>i. Non-Hindi-speaking States/UTs</li> <li>ii. SC Concentrated Areas in West Bengal</li> </ul>	NIE, New Delhi 3-5 December 2014  DIET, Hooghly, West Bengal 26-28 August 2014



	iii. SC Concentrated Areas in Tripura	SCERT, Agartala, Tripura 25-27 September 2014
	iv. SC Concentrated Areas in Assam	SCERT, Guwahati, Assam 9 -11 December 2014
3.	Orientation of Members of School Management Committee (SMC) on Inclusion in Education at Elementary Stage:	
	i. Tribal Dominated States (Chhattisgarh State)	NIE, New Delhi 7-9 January 2015
	ii. Tribal Dominated States (Jharkhand State)	NIE New Delhi 23-25 February 2015
4.	Strengthening Inclusive Education at Secondary Stage in States/UTs: Regional Capacity Building Workshop	NIE, New Delhi 29-31 December 2014
5.	Roll Out Workshop based on the contents of the handbook on 'Including Children with Special Needs at primary stage'	
	i. Northern Region	NIE, New Delhi 16-18 October 2014
	ii. SCERTs/SIEs/ National Level	NIE, New Delhi 28-30 October 2014
	iii. Southern Region	NIE, New Delhi 21-23 January 2015
6.	Training Programme of KRPs on the Implementation of the RTE Act from the Perspective of Children with Special Needs from Uttarakhand, Rajasthan and Gujarat	NIE, New Delhi 16-18 December 2014

### DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Guidance and Counselling, being the key concern, the department offers one-year Diploma Course in Guidance and Counselling for training of teachers, teacher-educators, school administrators as well as untrained guidance personnel. The theoretical input of the course consisted of guidance and counselling, theories of human adjustment and career development and their application in counselling, psychological assessment and appraisal, and uses of career information in guidance and counselling practices. The course also included intensive training in practical work such as interactive talks on developmental issues and career, group discussion, workshop, career exhibition, psychological assessment, individual and group counselling, etc., which was conducted and supervised in schools and integrated with the theory components. Internship or 'on-the-job experience' was also an important component of this course. The course is aimed at developing skills and competencies among in-service teachers, teacher-educators, school administrators and untrained guidance personnel to work as teacher counsellors/counsellors to provide guidance



to students in schools and other related settings. Teachers from Kendriya Vidyalayas, Jawahar Navodaya Vidyalayas, State government’s schools, SCERTs and private schools participated in the course. Forty-nine trainees completed the course successfully in the year 2014-15.

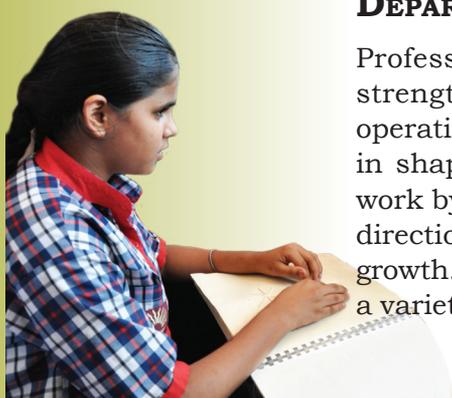
S. No.	Title of the Programme	Venue and Dates
1.	Diploma Course in Guidance and Counselling (Distance and face-to-face )	NIE, New Delhi 1 January 2014 to 31 December 2015
2.	Capacity Building of Teachers in Guidance Working in SC/ST Concentrated Districts	SCERT, Raipur, Chhattisgarh 24 to 28 November 2014. SIERT, Udaipur, Rajasthan 16 to 20 February 2015
3.	Orientation Programme for the Principals of Jawahar Navodaya Vidyalayas	Navodaya Leadership Institute, Chandigarh 21 to 23 January 2015
4.	Enrichment Programme for Teacher-Educators Teaching Psychology in Teacher Training Institutes of North-East Region	SCERT, Guwahati 11 to 15 November 2014



*Enrichment Programme for Teacher-educators Teaching Psychology in Teacher Training Institutes of North-East Region*

## DEPARTMENT OF TEACHER EDUCATION

Professional development is an essential pre-requisite for updating and strengthening of capabilities through furthering insights in the ascribed operational areas. In a broader perspective, professional development results in shaping persons to be of greater use to the organisation for which they work by strengthening their knowledge, skills, practices and attitudes. In this direction, NCERT provides opportunities to the faculty for their professional growth. The focus of the programme was participatory learning and reflection on a variety of professional issues as well as to equip the faculty with knowledge,



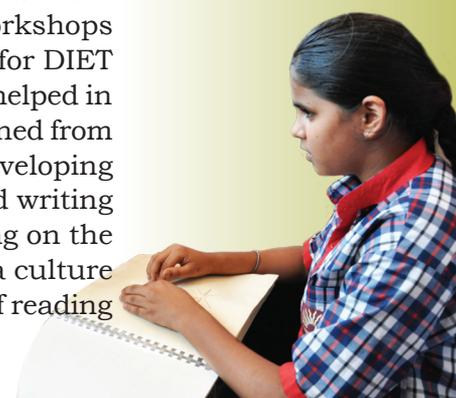
skills and proficiency desired for realising institutional objectives. This course with a focus on knowledge construction through research, innovation and development intends to help in realising the vision of NCERT regarding school and teacher education in the country.

Training programmes for KRPs of the NE States in English, social science, mathematics and science at upper primary level in collaboration with NERIE, Shillong was organised to reflect upon the current issues and challenges of upper primary schooling in the NE Region; to understand the learner and learning process in the elementary schools in NE Region; and to plan, organise, manage and assess classroom processes and provide meaningful learning opportunities for diverse learners within local specific context. The training covered the (i) generic themes viz., elementary education: issues, concerns and challenges; teaching-learning process and classroom organisation and management; making assessment child-friendly; how to motivate the children and teachers; performance indicators for elementary teachers (PINDICS) and (ii) subject specific themes in the subject areas of Science, Mathematics, English and Social Sciences. It facilitated and addressed the identified concerns/problems and regional needs etc., related to school education. The training methodology was participative and interactive with active involvement of KRPs in panel discussions, reflective discussions, group work, pair work and debates. A total of 125 KRPs were trained including English (32), Social Sciences (31) Mathematics (31) and Science (31).

S. No.	Title of the Programme	Venue and Date
1.	Orientation-cum-Refresher course for NCERT Faculty	NIE, New Delhi 1- 26 May 2014
2.	Training Programme for Key Resource Persons at Upper Primary Level in Teaching of English and Social Sciences of North Eastern Region	SCERT Guwahati, Assam 22-26 September 2014
3.	Training Programme for Key Resource Persons at Upper Primary Level in Teaching of Science and Mathematics of North Eastern Region	NERIE, Umiam (Shillong) Meghalaya 13-17 October 2014

### DEPARTMENT OF ELEMENTARY EDUCATION

With the objective of developing an understanding on components of Early Literacy Programme so as to support the state functionaries in implementing the programme in States and Union Territories, regional workshops were held for state key functionaries (SSA officials, SCERTs), teacher-educators and teachers at the RIEs/NERIE. In response to state demands, workshops were held for DEOs and BEOs of Haryana, Delhi State Teachers and for DIET faculty and teachers of Arunachal Pradesh. Early literacy programme helped in promoting the culture of reading and writing in schools. Feedback obtained from the participants indicated that the training programmes helped in developing more awareness about early literacy and the processes of reading and writing at the early stages. The participants developed a sound understanding on the importance and usage of appropriate children's literature to develop a culture of reading amongst children. They became familiar with the pedagogy of reading



and writing. They also prepared a plan in consultation with the resource team for regular monitoring and follow-up for effective implementation of the programme. Training programmes on *Early School Mathematics* were conducted faculties of DIETs, DRCs, SCERTs and states SSA pedagogy cells to develop in-depth pedagogical-content knowledge on the teaching-learning of mathematics taught in early school (Classes I and II). The activity-based approach was followed in which the participants were given hands-on material from the Mathematics Learning Kit to work. The participants appreciated the approach and found the demonstration sessions conducted in classrooms with children of these classes to be quite useful. Workshop conducted for participants from the states of Himachal Pradesh, Chhattisgarh, Odisha, Jharkhand, Uttar Pradesh, Maharashtra and Mizoram, discussed the major components of quality as envisaged in the QMTs, analyse the concerns expressed by the stakeholders and evolve strategy for implementation of QMTs. Presentation and discussion was made on various aspects of QMTs viz., students attendance, out-of-school children in age-appropriate class, textbooks distribution, children with special needs, SMCs, learners' achievement etc. The presentation and discussion updated the participants on the status of States with regard to implementation of QMTs and suggesting action points for strengthening monitoring mechanisms in the states.

S. No.	Title of the Programme	Venue and Date
<b>Early Literacy Programme</b>		
1.	An Orientation Programme for Early Literacy Consultants and Nodal Officers at RIEs	NIE, New Delhi 21-31 July 2015
2.	Regional Workshops for SSA Officials, SCERT and DIET Faculty, Faculty members of Core Team at RIE	RIE, Ajmer 19- 23 August 2014 NERIE, Shillong 18-22 August 2014 RIE, Mysore 22- 26 September 2014 RIE, Bhubaneswar 8-12 September 2014 RIE, Bhopal 13-17 October 2014 RIE, Ajmer 10 -14 November 2014 NERIE, Shillong 16-20 February 2015 RIE, Bhopal 9-13 February 2015 RIE, Mysore 29 December 2014 to 2 January 2015 RIE, Bhubaneswar 23 -27 March 2015



<b>Early School Mathematics Project</b>		
3.	Training Programme on Early School Mathematics Eastern, Western, Southern, Northern and North Eastern Region	Presbyterian Assembly House, Shillong 15-20 September 2014  Regional Centre for Education, Mysore 27-31 October 2014  RIE, Bhubneshwar 1-5 December  RIE, Ajmer 29 December 2014 to 2 January 2015
4.	A Workshop on Early School Mathematics Programme under SSA for Teacher-educators and KRPs	RIE Bhopal 19-23 January 2015
<b>Sarva Shiksha Abhiyan</b>		
5.	A Workshop on Implementation of Quality Monitoring Tools in States	NIE, New Delhi 20-21 January 2015

### DEPARTMENT OF EDUCATION IN LANGUAGES

Professional development programmes in Hindi, English, Urdu and Sanskrit language teaching were organised for teachers, key resource persons and master trainers at all stages. This helped in familiarisation of the participants with recent developments in the area of language education, teaching-learning strategies, ideas of *NCF-2005* and continuous assessment. The training programmes focused on adopting progressive pedagogies, relevant materials and interactive strategies for classroom transactions. It focussed on promoting mother tongue-based multilingualism in primary years to developing language proficiency from basic interpersonal communication skills to cognitively advanced language proficiency. Learning of language holistically and using authentic materials for learning languages were also the thrust areas of these training programmes. The training modalities used were interactive using pair work, group work, discussion, debate, project works etc. Multimedia was used to benefit the participants to understand the use of ICT in language classroom. Ample opportunities were given to participants to gain hands-on experiences through ICT. The participants were also apprised of the avenues for continuous professional development. The participants felt the training to be effective as it provided them exposure to new ideas and strategies for language teaching.

<b>S. No.</b>	<b>Title of the Programme</b>	<b>Venue and Date</b>
1.	Orientation of Master Trainers on Continuous Professional Development in Hindi Language Teaching (Upper Primary L1)	SIE, Allahabad, UP 27-31 January 2015
2.	Orientation of Master Trainers on Continuous Professional Development in Sanskrit Language Teaching (Upper Primary)	SIE, Allahabad, UP 27-31 January 2015



3.	Orientation of Master Trainers on Continuous Professional Development in English Language Teaching (Primary and Upper Primary Stages)	NIE, New Delhi 9-13 February 2015
4.	Orientation Programme for Master Trainers in Urdu at Upper Primary Stage	NIE, New Delhi 16-20 February 2015
5.	Orientation Programme for Master Trainers on Continuous Professional Development in Hindi Language Teaching (Upper Primary L2)	SCERT, West Bengal 16-20 March 2015
6.	Orientation Programme for Master Trainers in Urdu from Primary to Higher Secondary Stage.	Aurangabad 29 January to 2 February 2015

### DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

A three-week Refresher Course on ‘Application of Mathematics in Economics’ was organised with the intention of equipping lecturers/post-graduate teachers at higher secondary stage to deal with the mathematical expressions used in the economics textbooks and to help them overcome the uneasiness in using mathematical and statistical tools in teaching and learning economics. Based on the need assessment study findings that reiterated the suitability of the refresher course in dealing with problems and issues confronting them while transacting economic theory using mathematical expressions, the course was designed. The course covered basic mathematics, statistical tools and its interpretation, micro and macro economic theories and computer-aided economics with emphasis on practical sessions. Lecturers/Post-graduate teachers in Economics from states of Haryana, Himachal Pradesh and Sikkim attended the course. Outcome evaluation of the course done on the basis of the pre-test and post-test and participants’ feedback shows that the course apart



*Participants from states of Haryana, Himachal Pradesh and Sikkim attending the three-week Refresher Course on Application of Mathematics in Economics held at NIE, New Delhi*

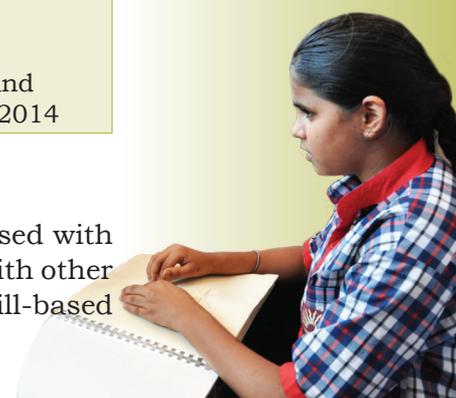
from serving teachers in keeping themselves abreast for the latest advances in the subject area also provided opportunities for them to exchange experience with their peers, helped the participants' progress with confidence and acquire the analytical skills.

For the professional development of teachers in commerce at higher secondary stage, three training programmes were conducted at Manipur, Dadra and Nagar Haveli and Andaman and Nicobar Islands. The thrust of the training was to update commerce teachers on the new Companies Act, 2013, equip them in handling changes in preparation and presentation of companies' financial statements and the accounting treatment thereof, handling project work in accounting and understanding case study approach to business studies. Interaction with local entrepreneurs and visit to the business/industrial site gave them exposure to real situations. The participants gained understanding in the use of real business cases in the teaching-learning of business studies. The programme also provided insights for the promotion of commerce education in tribal/NER region. In the interactive workshops for senior level officials and national and state resource persons in adolescence education, 135 master trainers and 46 resource persons were sensitised about AEP and NPEP including the implementation strategy. The broad themes covered were: process of growing up, understanding adolescence, prevention of HIV and AIDS and substance/drug abuse, concept of gender, health, nutrition and education, key determinants of population change, urbanisation and migration. The training programmes provided opportunities to participants to acquire needed skills for organising experiential learning activities in school, monitoring and evaluation of the project and effective implementation of the AEP and NPEP.

S. No.	Title of the Programme	Venue and Date
1.	Refresher Course on Application of Mathematics in Economics	NIE, New Delhi 10-28 November 2014
2.	(i) Professional Development of Teachers in Commerce at Higher Secondary Stage (Manipur) (ii) Dadra and Nagar Haveli (iii) Andaman and Nicobar Islands Manipur University, Imphal	Manipur University, Imphal 6-11 October 2014 Silvassa, Dadra and Nagar Haveli 15-20 December 2014 Shiksha Sadan, RMSA, Port Blair, A&N Islands 9-13 February 2015
3.	Interactive Workshops for Senior level officials and National and State Resource Persons in Adolescence Education	NIE, New Delhi 21-26 April 2014 5-10 May 2014 26-31 May 2014 and 22-26 September 2014

### DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

In-service training/orientation programmes for teachers were organised with the objectives of teaching arts at different stages, integration of arts with other subjects to subject teachers in learning of other and imparting skill-based



training for art educators at different levels. The thrust areas of the training programmes were integrated learning and pedagogy of arts. The training/ orientation programmes helped in capacity-building of states by training faculty of SCERT, DIET, SIE, DSERT, SIEMAT and JNV teachers as master trainers on art integrated learning and arts as a subject.



*Making puppets during art integrated learning programme held at SIE, Jammu*



*Master trainers performing during art integrated learning programme held at Patna, Bihar*

S.No.	Title of the Programme	Venue and Date
1.	Capacity-building programmes for master trainers on art integrated learning (eleven programmes)	SIE, Jammu 21-26 July 2014 SIE, Kashmir 4-9 August 2014 DSERT, Karnataka 18-23 August 2014 SIEMAT, Shimla 22-27 September 2015 SCERT, Patna 30 August-4 September 2014 SCERT, Gurgaon 10-14 November 2014 DSERT, Karnataka 17-22 November 2014 SCERT, Patna 28 November – 1 December 2014 SCERT, Gurgaon 6 January 2015 NERIE, Shillong 2-7 February 2015 DIET, Faridkot, Punjab 9-13 March 2015
2.	Orientation of Teachers and Principals in Arts Education of JNVs (Collaborative effort of NCERT with Navodaya Vidyalaya Samiti)	NIE, New Delhi 1-6 December 2014 NIE, New Delhi 15-20 December 2014



## DEPARTMENT OF GENDER STUDIES

Training programmes on gender issues in education were conducted for the principals of Jawahar Navodaya Vidyalayas (JNVs) in southern, eastern and north-eastern regions with the thrust on gender awareness and gender sensitisation. The objective was to develop an understanding among participants to identify gender bias and gender stereotypes in social and educational contexts; get them familiarised with some stereotypes and initiatives that may help to address these issues; and enable the participants to evaluate teaching-learning materials and process from a gender perspective. The training programme enriched participants' understanding of the concept of gender, gender equality, gender stereotypes, gender bias etc., and helped them to understand as to how both identities 'sex' and 'gender' determine gendered norms and social practices that affect the lives of both males and females. Participants reported that the understanding which they developed during the programme about concepts equipped them to use these terms appropriately in everyday life, particularly while transacting lessons which have more nuanced gender aspects. Most importantly, the programme made it clear that gender is a social construct and is characterised by not only family, community, society at large but also by the teaching-learning process. The overall interaction equipped them to understand the usage of language as a tool in addressing gender inequalities and the way the content analysis of language and literature help teachers to address gender stereotype and gender bias. The Kasturba Gandhi Balika Vidyalaya (KGBV) teachers of Bihar, Himachal Pradesh, Haryana and Rajasthan were oriented on the bridge course prepared for girls and the teacher training package on different subject areas. The teachers were provided training so as to enable them to translate and transact different concepts with the help of participatory pedagogical processes. The participants of the training were KGBV teachers of mathematics, science, social science and languages from the states of Bihar, Haryana, Himachal Pradesh and Rajasthan. Feedback of the overall training programme taken by administering the evaluation performa showed that the bridge course and teacher training packages were appropriate and effective in translating the concepts at the elementary stage. The participants were satisfied with the various aspects of the training programme and suggested that besides the themes transacted, there should be session on vocational education and the programme should be organised every year and for a longer duration.

S. No.	Title of the Programme	Venue and Date
1.	Training Programme for KGBV Teachers on Bridge Course and Teacher Training Package for States of Haryana, Bihar, Rajasthan and Himachal Pradesh	NIE, New Delhi 5-11 September 2014 NIE, New Delhi 16-22 September 2014
2.	Training Programme on Gender Issues in Education for the Principals of Jawahar Navodaya Vidyalayas (JNVs) - North Eastern Region	NERIE, Shillong 29 October-1 November 2014
	Eastern Region	RIE, Bhubaneswar 11-14 November 2014
	Southern Region	RIE, Mysore 5-8 January 2015



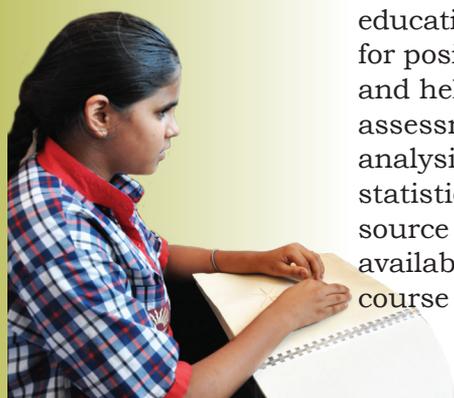
## DIVISION OF EDUCATIONAL RESEARCH

With the trust on the capacity-building of state functionaries in conducting research, the division organised capacity-building programme for elementary school teachers in conducting action research, research methodology course for DIET and SCERT faculty and also has initiated an online course on action research in education. The research methodology course advocated the need and importance of educational research, oriented the teacher-educators about various aspects of research methodology and helped them in developing research proposals on themes relevant to their context. The capacity-building programme and the online course on action research provided teachers with the knowledge and skills to integrate action research as a teaching and problem solving methodology. The programmes helped in orienting the elementary school teachers about the process of action research, in identifying problems for action research and application of need-based techniques of action research. During the course, the participants developed action research proposals which they shall take up in consultation with state authorities. The online course participants, inclusive of faculty of DIETs/SCERTs, KVs/JNVs/, Universities and NCERT, found the online course to be good and informative that can help in improving teaching practices.

S. No.	Title of the Programme	Venue and Date
1.	Research Methodology Course for DIET and SCERT Faculty	SCERT, Bhopal 26-30 August 2014
2.	Capacity Building of Elementary School Teachers in Conducting Action Research	DIET, Amritsar 7-10 October 2014
3.	Online Course on Action Research in Education	NIE, New Delhi 16 February to 30 May 2015

## EDUCATIONAL SURVEY DIVISION

The thrust areas of the training programmes of the division were on assessment and statistical data analysis. Capacity-building programmes to the KRPs of SCERTs/SIEs and state educational boards were conducted to enable them in preparing quality questions/model question papers, in planning and implementing the school-based CCE, appraise state functionaries with the latest developments in examinations at school stage, enhance capacity in survey techniques, sampling procedures, data management, data analysis and reporting of survey studies, build capacity of KRPs in states in taking up state level achievement surveys. The programmes also oriented teachers in educational assessment as per constructivist approach, sensitised the teachers for positive attitude towards the achievement of SC, ST and minority children and helped in collaborating with states in developing strategies for improving assessment of students' learning. In view of the importance of the statistical analysis of research data while conducting a research study, a course on statistical analysis of data using open source tools was conducted. The open source tools are easy to use and freely available as compared to commercially available software like SPSS, SAS etc., which are otherwise very costly. The course dealt with the use of open source tools, especially 'R' which is used



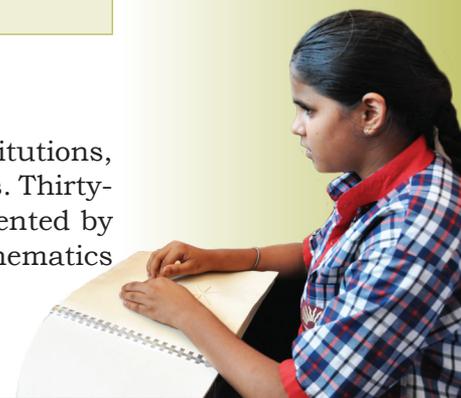
worldwide by researchers for analysing research data. The training imparted will equip the researcher to make use of software packages for analysing large data files with thousands of variables.

S. No.	Title of the Programme	Venue and Date
1.	Capacity Building on Analysis of Question Papers and Development of Quality Questions	DERT, Shillong, 2-6 February 2015
2.	Training Programme for Key Resource Persons in Question Paper Setting and Analysis of Answer Scripts	Assam Higher Secondary Education Council, Guwahati 23-27 March 2015
3.	Training Programme in the Development of Balanced Question Papers at Secondary Level	Punjab School Education Board, SAS Nagar, Mohali 24-28 March 2015
4.	Orientation of KRPs from SC, ST and Minority Concentrated Regions of J&K on Examination Reforms in the Context of NCF-2005 and Assessment	J & K Board of School Education, Srinagar 16-20 March 2015
5.	Orientation of KRPs from SC/ST/Minority Concentrated Areas of Manipur on Examination Reforms in the Context of NCF-2005 and Assessment	Manipur Board of Secondary Education, Imphal 23-27 March 2015
6.	Five-days Training Programme on Analysis of Data Using Open Source Tools for NIE faculty  for RIE faculty	NIE, New Delhi 8-12 September 2014 and 22-26 September 2014  16-20 March 2015

Nurturance Programme for NTS Awardees		
1.	Nurturance Programme for NTS Awardees (Awardees from states of Punjab, Jammu and Kashmir, Himachal Pradesh and Chandigarh)	Indian Institute of Science and Education and Research (IISER), Mohali 7-10 October 2014
2.	Awardees from state of Karnataka	Indian Institute of Science, (IISc) Bangalore 15-19 October 2014
3.	Awardees from state of Maharashtra	Homi Bhabha Center for Science Education, Mumbai 3-7 November 2015

### DIVISION OF EDUCATIONAL KITS

The key resource persons of SCERTs/SIEs/RMSA/SSA and other institutions, were oriented on preparation and use of science and mathematics kits. Thirty-four KRPs from Odisha state (belonging to SC/ST category) were oriented by subject and technical experts about overall use of science and mathematics kits during the course.



S. No.	Title of the Programme	Venue and Date
1.	Orientation of Key Resource Persons of SCERT/SIE/RMSA on Preparation and Use of Science and Mathematics Kits	NIE, New Delhi 11-14 August 2014 NIE, New Delhi 19-22 August 2014

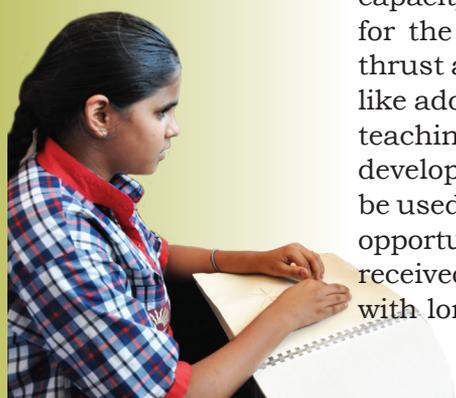
### PLANNING AND MONITORING DIVISION

To improve the efficiency of the DIET faculty who are working in the Planning and Management branch of the DIETs, two five-day training programmes on project planning, implementation, monitoring and evaluation were conducted. The DIET faculty working in the northern states of Delhi, Haryana, Jammu and Kashmir, Uttar Pradesh, Himachal Pradesh, Uttarakhand, Rajasthan and Punjab participated in the programme conducted at NIE, New Delhi and DIET faculty working in the SC dominated areas of the States of Gujarat and Chhattisgarh, Madhya Pradesh and Maharashtra participated in the programme conducted at RIE, Bhopal. A training package 'Educational Planning, Management and Evaluation' developed by the division with the help of the experts from all over India and the faculty of PMD was provided to the trainees. The participants are benefitted with the understanding of new thoughts and developments in the areas of project planning, integration of ICT for project monitoring and implementation, evaluation of projects and also enabled to undertake some need-based projects in the context of RTE, 2009, inclusive education and CCE. A training package 'Educational Planning, Management and Evaluation' developed by the division with the help of the experts from all over India and the faculty of PMD was provided to the trainees.

S. No.	Title of the Programme	Venue and Date
1.	(i) Training of DIET Faculty in Project Planning, Implementation, Monitoring and Evaluation (Northern State)	NIE, New Delhi 22-26 September 2014
	(ii) SC Concentrated Districts of Western Region	RIE, Bhopal 23-27 February 2015

### RMSA PROJECT CELL

In view of evolving mechanism of continuous in-service professional development of secondary stage teachers and also improving classroom processes and students' learning in science, mathematics, languages and social sciences, capacity-building programmes for KRPs in these subject areas were conducted for the selected states using ITPD Packages developed by the NCERT. The thrust areas covered under these training programmes were: generic concerns like adolescent issues, gender concerns, inclusivity, CCE, integration of ICT in teaching-learning process, guidance and counselling, means of professional development along with subject-specific areas and varied pedagogies that can be used in the classrooms. KRPs were provided with hands-on experiences and opportunities to reflect on various issues concerning secondary stage. Feedback received from the KRPs emphasised on the continuity of these programmes with longer duration, need of more content-specific sessions, more hands-on



activities (practical activities), hands-on experience with computers, integrating technology in the classrooms, etc.



*Participants during discussion in the workshop on professional development of mathematics teachers*

S. No.	Title of the Programme	Venue and Date
1.	Refresher programme in Science and Mathematics	SCERT, Patna 19-21 November 2014
2.	Capacity Building Workshop for Bihar (Social Science)	SCERT, Patna 22-24 November 2014
3.	Capacity Building Programme for Punjab (Science and Mathematics)	DIET, Fatehgarh Sahib, Punjab 14-18 July 2014
4.	Capacity Building Programme for J&K (Science, Mathematics and English)	RMSA, Srinagar 29 December 2014 to 2 January 2015
5.	Capacity Building Programme for J&K (Science, Mathematics and English)	RMSA, Jammu 3-7 January 2015
6.	Capacity Building Programme for Goa (Science and Mathematics)	Directorate of Education Porvorim, Goa 15-19 September 2014
7.	Capacity Building Programme for Goa (Social Science, Hindi and English)	Directorate of Education Porvorim, Goa 22-26 September 2014

## PUBLICATION DIVISION

The Publication Division organised two workshops. One of them was to apprise the faculty members on various steps towards generating Camera Ready Copy. A total of 32 faculty members attended the workshop. The other was an orientation programme for the freelance editors and proof readers. A total of 30 participants attended this programme.

S. No.	Title of the Programme	Venue and Date
1.	'Understanding the Nuances of Quality Book Making', for the NCERT Faculty.	CIET, NCERT 8-9 July 2014
2.	Orientation Programme for Freelance Editors and Proof Readers (Hindi, English and Urdu).	CIET, NCERT 22-23 December 2014



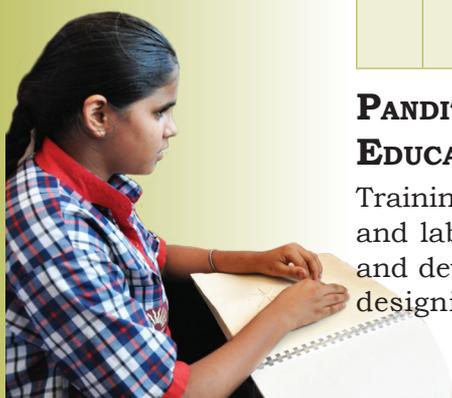
### CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Training was imparted to KRPs/master trainers/teachers deputed by state governments, SCERTs, DIETs, etc., on development of e-content for NROER, translation of already present concepts and e-content in multiple languages and for evaluation and validation of the e-content. The training helped in enhancing the understanding on e-content creation, translation, evaluation/validation of e-content and also creating experts in the mentioned activities for providing training to others in their respective states.

S. No.	Title of the Programme	Venue and Date
1.	Training Programme on Development and Management of NROER	NIE, New Delhi 28 April to 2 May 2014 NIE, New Delhi 26 May 2014 NIE, New Delhi 9-13 June 2014 NIE, New Delhi 23-27 June 2014 NIE, New Delhi 28 July to 1 August 2014 NIE, New Delhi 25-29 August 2014
2.	Training of Principals of Jawahar Navodaya Vidyalayas on NROER and ICT Curriculum	Lucknow, 23 June 2014 Hyderabad 24 June 2014 Chandigarh 26 June 2014 Kolkata 24 June 2014 Jaipur 4 September 2014
3.	Training of PGTs/TGTs of Computer Science of JNVs on ICT Curriculum	Mandi, Himachal Pradesh 19-20 August 2014 Haridwar, Uttarakhand 25-26 August 2014 Raipur, Chhattisgarh 1-2 September 2014 East Godawari, Telangana 9-10 September 2014

### PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

Training programmes for developing teaching skills in classroom, workshop and laboratory for teachers of different states and also on the latest trends and developments in the area of dairy technology, retail marketing, garment designing and making, entrepreneurship development, horticulture and



banking and finance were conducted by the institute. It acquainted teachers in understanding the role and dynamics of vocational teacher, comprehending models of curriculum implementation, formulating general and specific objectives, comparing teaching methods and use of case and project methods, competency-based training, constructivist approaches, design and use of various media, evaluation and assessment methods. In all, 348 teachers from Madhya Pradesh, Chhattisgarh, Maharashtra, Odisha, Gujarat, Goa, Himachal Pradesh, Karnataka, Andhra Pradesh and Haryana benefitted from the programme. The training programmes organised on the vocational subjects acquainted the subject teachers about NSQF, role of vocational teachers, vocational pedagogy and latest trends and technology adopted in different vocational areas. The field visits organised during the programmes helped in providing hands-on experience of the jobs in concerned sectors/areas.

S. No.	Title of the Programme	Venue and Date
1.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Maharashtra	PSSCIVE, Bhopal 21-25 July 2014
2.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the States of U.P., Jharkhand and Bihar	SCERT, Lucknow 8-12 September 2014
3.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the States of Jharkhand and Bihar	PSSCIVE, Bhopal 25-29 August 2014
4.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Himachal Pradesh	PSSCIVE, Bhopal 15-19 September 2014
5.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Maharashtra	Dharampeth Science College Nagpur 7-11 October, 2014
6.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the States of Himachal Pradesh and Jammu and Kashmir	Directorate of Higher Education, Shimla 13-17 October 2014



*Participants of the teachers training programme on latest trends and developments in Entrepreneurship*



7.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the States of M.P., Chhattisgarh and Gujarat	PSSCIVE, Bhopal 17-21 November, 2014
8.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Maharashtra	CTHS, DVET (RO), Nasik 2-6 February 2015
9.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Maharashtra	Dharmapeth Science College Nagpur 11-15 February 2015
10.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the States of Himachal Pradesh, Punjab and Haryana	DIET, Dharamshala 26 Feb-02 March 2015
11.	Teachers Training for Developing Teaching Skills in Classroom, Workshop and Laboratory for the State of Maharashtra	S.B. College, Aurangabad 16-20 March 2015
12.	Teacher Training Programme on Latest Trends and Developments in Retail Marketing Management	PSSCIVE, Bhopal 16-27 June 2014
13.	Teacher Training Programme on Latest Trends and Developments in Dairy Technology	PSSCIVE, Bhopal 18-28 July 2014
14.	Teacher Training Programme on Latest Trends and Developments in Entrepreneurship Development	PSSCIVE, Bhopal 27-31 October 2014
15.	Teacher Training Programme on Latest Trends and Developments in Garment Designing and Making	PSSCIVE, Bhopal 15-26 December 2014
16.	Teacher Training Programme on Latest Trends and Developments in Entrepreneurship Development	PSSCIVE, Bhopal 8-12 January 2015
17.	Teacher Training Programme on Latest Trends and Developments in Automobile Technology	PSSCIVE, Bhopal 2-6 February 2015

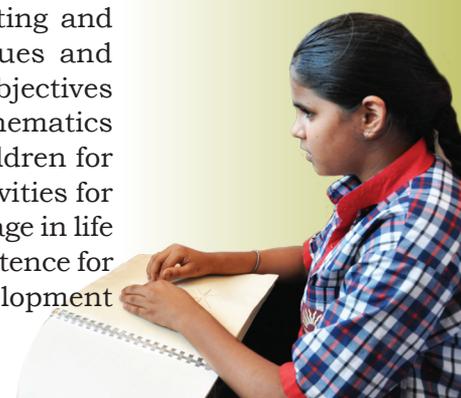


*Participants of the teachers training programme on developing pedagogical skills in classroom workshop and laboratory for the southern states and Himachal Pradesh*

18.	Teacher Training Programme on Latest Trends and Developments in Horticulture	PSSCIVE, Bhopal 9-13 March 2015
19.	Teacher Training Programme on Latest Trends and Developments in Banking and Finance	PSSCIVE, Bhopal 23-27 March 2015
20.	Capacity Building Programme for Key Functionaries of Northern Region	PSSCIVE, Bhopal 30-31 July 2014
21.	Capacity Building Programme for Key Functionaries for Eastern Region	Jadavpur University, Kolkata 20-21 August 2014
22.	Capacity Building Programme for Key Functionaries under TSP for Northern Region	DIET, Ranchi 5-7 August 2014
23.	Capacity Building Programme for Key Functionaries under TSP for North-Eastern Region	Directorate of Education Gangtok 2-3 September 2014
24.	Capacity Building Programme for Key Functionaries for Northern Region	PSSCIVE, Bhopal 8-9 October 2014
25.	Capacity Building Programme for Key Functionaries of Southern Region	PSSCIVE, Bhopal 3-4 November 2014
26.	Capacity Building Programme for Key Functionaries of Northern Region	Directorate of Higher Education, Shimla 28-29 January 2015
27.	Capacity Building Programme for Key Functionaries of Western Region	PSSCIVE, Bhopal 12-13 February 2015
28.	Capacity Building Programme for Key Functionaries of Western Region	Directorate of Vocational Education, Nagpur 4-5 February 2015
29.	Capacity Building Programme for Key Functionaries of Southern Region	BSNL Training Centre Thiruvananthapuram 18-20 March 2015
30.	Capacity Building Programme for Key Functionaries of Central Region	PSSCIVE, Bhopal 2-3 March 2015
31.	Capacity Building Programme for Key Functionaries under SCP for Western Region	A.G. High School, Ahmedabad 23-24 March 2015

### REGIONAL INSTITUTE OF EDUCATION, AJMER

Fourteen training programmes, which include the programmes for SC/ST and minorities dominated areas, were organised on the thrust areas, enhancing the use of technology, addressing the concerns of RTE Act, promoting and conducting educational research, strengthening education for values and quality enhancement of teacher education programmes. The main objectives of the training programmes were to evolve practical pedagogy in mathematics education for student teachers at secondary level, to prepare the children for primary classes mainly through play-way method and organising activities for cognitive, social and emotional development, develop multimedia package in life science at senior secondary level for development of professional competence for future transaction, to follow constructivist pedagogy and recent development



in Hindi for transaction at upper primary level, capacity-building in teaching of science through innovative strategies for quality improvement at upper primary and secondary level, planning and conducting laboratory work and promoting activity-based learning through science kits to bring about qualitative improvement in skills of teaching science, to understand about integration and promotion of CCE in the teaching-learning process, to develop skills among the DIET faculty in conducting action research, develop abilities in teachers of non-Urdu speaking areas to teach Urdu effectively at elementary level and understand and appreciate the importance of theatre in education including peace-based values and develop skills in using theatre in transaction of content in schools. The training programmes were mainly held for the teachers and teacher-educators at elementary, secondary and senior secondary levels. The outcome of the training programmes include developing capacity among the participants as per the objectives of the programme, helping them to conduct similar programmes in their states, districts, block levels by providing necessary guidelines and materials.

S. No.	Title of the Programme	Venue and Date
1.	Capacity Building of KRPs belonging to SC Dominated Areas in Teaching of Life Sciences at Senior Secondary Level	RIE, Ajmer 19-23 January 2015
2.	Capacity Building Programme on Hindi Language for Teacher Educators of SC Dominated Areas of Uttar Pradesh and Uttarakhand States	RIE, Ajmer 8-12 December 2014
3.	Capacity Building of KRPs belonging to ST Dominated Areas in Teaching of Science in the Light of NCF-2005 at Secondary Level in Two Phases	RIE, Ajmer 13-17 October 2014 12-16 January 2015
4.	Capacity Building for Teachers of SC Dominated Areas in Laboratory Work in Science in the Light of NCF-2005 at Secondary Level	RIE, Ajmer 19-23 January 2015
5.	Capacity Building of Teacher Educators / KRPs belonging to ST Dominating Areas for Teaching of Science in Light of NCF- 2005 at Upper Primary Level for the Northern Region	RIE, Ajmer 5-9 January 2015
6.	Capacity Building of KRPs belonging to Minority Dominated Areas on Activity Based Learning in Science at Secondary Level in the Light of NCF-2005.	RIE, Ajmer 17-21 November 2014
7.	Capacity Building of KRPs belonging to SC and ST Dominated Areas in the Understanding of CCE in the Light of NCF-2005 at Elementary Level using Exemplar Material developed by NCERT	RIE, Ajmer 12-16 January 2015 19-23 January 2015
8.	Capacity Building of the Faculty of DIETs Located in Minority Dominated Districts in Action Research for the State of Uttarakhand and U.P.	RIE, Ajmer 17-21 November 2014 02-04 February 2015



9.	Capacity Building of KRPs in Teaching of Urdu at Elementary Level (for Non-Urdu Speaking Areas of H.P., Haryana and Rajasthan)	RIE, Ajmer 5-9 January 2015
10.	Workshop on Theatre Education for Pre-service Students of RIE, Ajmer	RIE, Ajmer 19-30 December 2014
11.	Capacity Building of Teacher Educators of DIETs Operating in ST Dominating Areas in the Understanding of Continues and Comprehensive Evaluation (CCE) at Primary Level for the States of Rajasthan and Himachal Pradesh	RIE, Ajmer 15-19 December 2014
12.	Capacity Building Programme for KRPs of ST Category of Uttarakhand and Himachal Pradesh States on Enrichment of Peace Based Values at Primary and Upper Primary Level through Theatre Education	RIE, Ajmer 22-26 September 2014
13.	Orientation Programme of DIET Faculty for Improvement of Science and Mathematics Education at Upper Primary Stage under SSA	RIE, Ajmer 9-13 February 2015

### REGIONAL INSTITUTE OF EDUCATION, BHOPAL

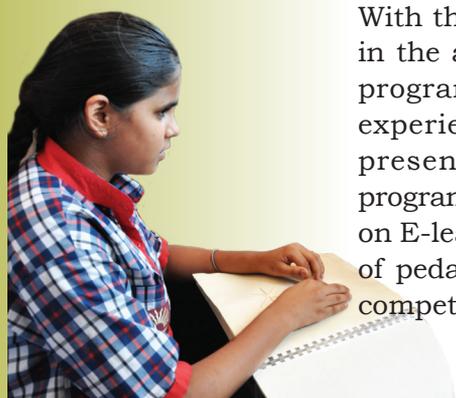
Training programmes were held for principals and teachers to develop knowledge and skills in using ICT in education acquaint them in the use of web 2.0 tools to integrate ICT in teaching-learning process. The training programme covered the topics, Introduction to Computer and ICT; Use of MS Office; Use of MS Excel; Movie making; An introduction to Internet; Web 2.0 Technology; Blog; Social Media; Use of Power Point and Multimedia Resources. In order to develop understanding about the concept of 'peace education' and 'education for peace', integration of education for peace in different curricular and co-curricular activities in school, using pedagogical skills and strategies in and out of classrooms for promoting peace at secondary level training programme was organised for the secondary school teachers from SC/ST dominated areas on education for peace from the states of Madhya Pradesh, Maharashtra, Chhattisgarh and Gujarat. The refresher course on emerging trends in schooling-oriented teachers into the philosophy of NCF-2005 and its implications to school and acquainted with latest research outcomes in the field of education. Training was imparted to KRPs in tribal schools at elementary stage in Madhya Pradesh and Chhattisgarh on using different innovative teaching methods of mathematics, on using different mathematical software like geo-gebra etc and in preparing and using different low-cost teaching aids for effective classroom transaction and to make Maths learning joyful. School teachers of SC/ST dominated areas were oriented on various aspects of Hindi teaching, strategies to use Hindi textbooks, develop certain basic practical skills in physical sciences (physics and chemistry) and develop skills and understanding of complicated theories and the related experiments. The theatre workshop for pre-service teacher trainees of RIE, Bhopal helped in training pupil-teachers with Indian art and culture through theatre and using theatre's experience in teaching-learning process.



S. No.	Title of the Programme	Venue and Date
1.	Training of Principals and Teachers of Minority Educational Institutions on integration of web 2.0 Technologies in Teaching and Learning	RIE, Bhopal 10-14 November 2014 8-12 February 2015
2.	Training of Secondary School Teachers from SC/ST Dominated Areas on Education for Peace	RIE, Bhopal 24-28 November 2014
3.	Refresher Course on Emerging Trends in Schooling for the Professional Development of DMS Teachers	RIE, Bhopal 6-26 June 2014
4.	Training of KRPs on Teaching Mathematics in Tribal School at Elementary Stage	RIE, Bhopal 1-5 September 2014
5.	Training Programme for School Teachers of SC/ST Dominated Areas in Teaching of Hindi	RIE, Bhopal 23-27 March 2015
6.	Training Programme for Higher Secondary Teachers of Schools Located in SC/ST Dominated Areas to Develop Practical Skills in Physical Sciences	RIE, Bhopal 9-13 January 2015
7.	Theatre Workshop for Pre-service Teacher Trainees of RIE, Bhopal	RIE, Bhopal 20 January to 6 February 2015
8.	Capacity Building Programme for Principals of High School and Higher Secondary Schools (CTE, Dewas)	RIE, Bhopal 27-30 May 2014
9.	Training Programme for Teacher Educators on Curriculum Development (IASE, Bhopal)	RIE, Bhopal 9-12 June 2014
10.	Capacity Building Programme in Teaching of Educational Psychology	RIE, Bhopal 23-27 June 2014
11.	Capacity Building Programme in English for <i>Gyanpunj</i> Team (DPI, Bhopal)	RIE, Bhopal 3-7 November 2014
12.	Capacity Building Programme in Mathematics for <i>Gyanpunj</i> Team (DPI, Bhopal)	RIE, Bhopal 10-14 November 2014
13.	Capacity Building Programme in Science for <i>Gyanpunj</i> Team (DPI, Bhopal)	RIE, Bhopal 3-7 December 2014
14.	Content Enrichment Programme for the PGTs in Physics of NVS	RIE, Bhopal 18-27 November'14
15.	Capacity Building Programme in Teaching of Mathematics for Teacher Educators (RSK, MP)	RIE, Bhopal 4-8 January 2015

### REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

With the objective to develop/adapt training modules on inclusive education in the area of minorities and socially disadvantaged section, tryout training programmes were organised. The training programme was designed in experiential mode, wherein activities were carried out using PPT/LCD presentation, discussion, brainstorming and group activity. Training programme was organised for teachers of SC/ST dominated areas of Jharkhand on E-learning resource material in Biology. The main focus was on integration of pedagogical, content and technological knowledge. To develop skills and competency in advance research methods and data analysis, training was

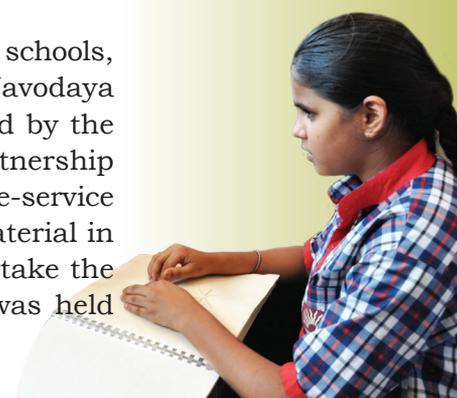


imparted on quantitative data analysis by using SPSS, Factor analysis, HLM and its uses in educational research. This shall enable the participants to use the tools for conducting research in education. For effective implementation of the continuous and comprehensive evaluation in DM Schools and using assessment information for enhancing quality of students learning, refresher course was organised for teachers of DM schools. Pre-service trainee students-teachers were trained with the objective to enable them to integrate art with the other curricular areas for effective transaction of the curriculum. Through the Workshop (theatre), the participants were oriented to art education. The feedback of the programme was impressive and was highlighted as an innovative practice for improving the quality of learning in school.

S. No.	Title of the Programme	Venue and Date
1.	Adaption and Tryout of Training Module on Inclusive Education in the Area of Minorities and Socially Disadvantaged Section for KRPs (West Bengal)	SCERT, West Bengal 20-24 October 2014 16-20 February 2015
2.	Professional Development of Teachers from SC/ST Dominated Areas through E-learning Resource Material in Biology at Senior Secondary Level	RIE, Bhubaneswar 16-17 August 2014 1-05 November 2014 4-8 February 2015
3	Advanced Research Methods and Data Analysis in Education for Faculty Members of RIE and D.M. School, Bhubaneswar	RIE, Bhubaneswar 4-10 June 2014
4	A ten-day Refresher Course for D.M. School Teachers on Effective Implementation of CCE and Professionalism in School	RIE, Bhubaneswar 7-16 May 2014
5	Theatre workshops for Pre-service Teacher Trainees of RIE, Bhubaneswar	RIE, Bhubaneswar 12-14 September 2014 20-21 September 2014 11-12 October 2014 18-19 October 2014 23-25 October 2014 26 October 2014 - 01 November 2014 2-4 November 2014 6-8 November 2014 9-10 November 2014

### REGIONAL INSTITUTE OF EDUCATION, MYSORE

For enabling the JNV teachers to undertake the carrier guidance in their schools, training programme on career guidance for the TGTs and PGTs of Navodaya Vidyalayas in the Hyderabad region was organised. It was organised by the institute as a reciprocal to Navodaya Vidyalaya Samiti for their partnership with the institute for conducting internship programme for different pre-service courses. The training programme based on the available training material in the institute with the objective to enable the JNV teachers to undertake the carrier guidance in their respective schools. Training programme was held



for the capacity-building of SCERT, DIET and school librarians to modernise the library. On the basis of the specific needs and requirements of the target group, training inputs and the training materials were designed and training was imparted.

S. No.	Title of the Programme	Venue and Date
1.	Training Programme on Career Guidance for the TGTs and PGTs of Navodaya Schools of Hyderabad Region	RIE, Mysore 15-19 December 2014
2.	Capacity Building of SCERT, DIET and School Librarians to Modernise the Library	RIE, Mysore 19-23 January 2015

### **NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM (SHILLONG)**

The thrust areas of the training programmes conducted were gender equality, school visioning, art integrated learning, minority education, inclusive education and sign language, ECCE, elementary education, social science and English education, tribal/minority languages, SSA, science education, action research, ICT and children with special needs. Most of these programmes were proposed and conducted as per the needs identified in the State Coordination Committee meeting of the respective State governments. The training programmes helped in generating awareness on gender issue, self-introspection and self-reflection, developing a vision of the school in the context of several new developments in the field of education, training master trainers in art integrated learning with different curricular subjects, orienting the teachers in language education for children with special needs, training master trainers on various skills and activities to be use for all-round development of the child and on different dimensions of teaching and learning related to the subjects, orienting teachers in the constructivist approach to teaching-learning process and empowering the teacher in the new approaches of language in teaching programmes,



*Key Resource Persons during ICT Competencies Development Programme for use of ICT in Teaching-Learning Process*



reviewing the progress of Early Literacy Programme in the states of North East, sensitising the need and importance of Guidance and Counselling in the schools, developing a training package on action research, integrating the use of ICT in teaching-learning process and building pedagogical competency of the teachers to develop activity, experimental skills of the students. The clientele of the training programmes, teachers, teacher-educators, CRC/BRC, DIETs, BMCs, KRPs, Master Trainers, Principals, SCERTs found the programme to be satisfactory and they were able to come up with different ideas in order to implement the method of teaching-learning process in their respective areas.

S. No	Title of the Programme	Venue and Date
1.	Orientation of KRPs on Gender Equality and Empowerment in NE-States under TSP	SCERT, Guwahati 16-20 March 2015
2.	Enabling KRPs of Manipur for School Visioning	SCERT, Manipur 27 February to 5 March 2015
3.	Art Integrated Learning at Lower Primary Level: A Training Programme for Master Trainers of the State of Assam and Meghalaya	NERIE, Umiam (Shillong) Assam 25-29 August 2014 8-12 September 2014
4.	Capacity Building Programme on Pedagogy for Master Trainers at Upper Primary Level from Minority Institutions of the State of Meghalaya	NERIE, Umiam (Shillong) 23-27 March 2015
5.	Training of KRPs/Teachers/Teacher-Educators on Sign Language at the Elementary Level	NERIE, Umiam (Shillong) 23 February to 4 March 2015
6.	Capacity Building of KRPs/Master Trainers of Tripura on ECCE	SCERT, Agartala 11-13 February 2015
7.	Training of KRPs/ Teacher-educators of the Elementary Level of NE States on Pedagogical Approaches and Content Enrichment in English Language, EVS and Mathematics	SCERT, Guwahati 14-18 July 2014
8.	Revamping of Education in NE – Social Science and English (NEC funded)	SCERT, Guwahati 22-26 September 2014
9.	Teaching-learning of Social Sciences at Secondary Stage	NERIE, Umiam (Shillong) 15-19 December 2014
10.	Training in Constructivist Approach to Teaching of Social Sciences at Upper Primary Level for Teacher educators	SCERT, Guwahati, Assam 16-20 March 2015
11.	Training of Teachers on Teaching of Tribal/Minority Languages for the State of Manipur	SCERT, Manipur 30 September to 9 October 2014
12.	Second Regional Workshop for Reviewing and Capacity Building of SSA/SCERT/ DIET Officials/Faculty on Early Literacy Programme (under SSA)	NERIE, Umiam (Shillong) 16-20 February 2015



13.	Orientation Programme for the Principals of JNVs of the North-East Region	NERIE, Umiam (Shillong) 16-18 February 2015
14.	Training of KRPs of Meghalaya on Teaching and Learning of Science at Upper Primary Level	NERIE, Umiam (Shillong) 17-21 February 2015
15.	An Internship-based Training on Action Research	SCERT, Agartala, Tripura 30 July to 1 August 2014 and 30-31 January 2015
16.	ICT Competencies Development for Key Resource Persons to use ICT in Teaching-learning Process	NERIE, Umiam (Shillong) 27 October to 5 November 2014 and 16-20 February 2015
17.	Training on Early School Mathematics Project under SSA	Presbyterian Church, Shillong 15-20 September 2014
18.	Revamping of Education in NE – Improving the Quality of Teaching in Science, Mathematics, English and Social Science in Schools-Skill Up gradation-cum Motivation Course: Training Programme for KRPs at Upper Primary Level of North-Eastern Region	NERIE, Umiam (Shillong) 13-17 October 2014
19.	Orientation of DIET Faculty of NE Region for Improvement of Science and Mathematics Education at Upper Primary Stage	NERIE, Umiam (Shillong) 23-27 February 2015
20.	Training of BR and CR Persons on Teaching-learning of Science, Mathematics and Social Sciences at Elementary Level	SCERT, Agartala, Tripura 9-13 March 2015
21.	Training for KRPs of NE on Education of Children with Special Needs at Elementary Level	NERIE, Umiam (Shillong) 11-25 March 2015
22.	Orientation on Reflective Teaching-learning Practices among Secondary Level History Teachers of NE-States	NERIE, Umiam (Shillong) 23-27 March 2015





## 6. Extension Activities

NCERT extends its operation in the form of organising international, national as well as regional meets/seminars, national and regional level competitions, conferences, regional review workshops, camps and sensitisation workshops, extension lectures, book exhibitions, *melas*, etc., to reach out to its stakeholders across the country. It undertakes comprehensive extension programme in which departments of the NIE, RIEs, CIET and PSSCIVE are engaged in activities to reach out to functionaries and for providing academic support to States/UTs.

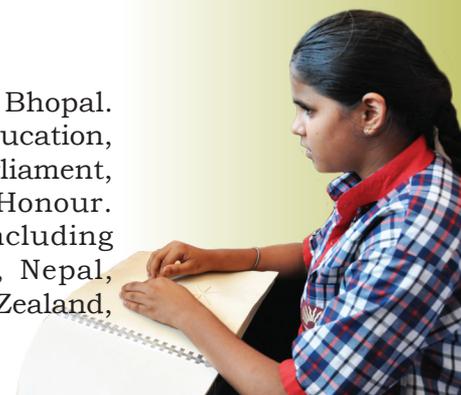
### ***International Conference on Emerging Trends in Technical and Vocational Education and Training – A Vision for 2025***

An International Conference on ‘Emerging Trends in Technical and Vocational Education and Training (TVET)—A Vision for 2025’ was



*International Conference on Emerging Trends in Technical and Vocational Education and Training : Vision 2025 organised by PSSCIVE, Bhopal*

organised by PSSCIVE from 18 to 20 February 2015 at MPCST, Bhopal. The conference was inaugurated by Hon'ble Minister of School Education, Govt. of Madhya Pradesh, Shri Deepak Joshi. Hon'ble Member of Parliament, Shri Alok Sanjar, graced the inaugural ceremony as Guest of Honour. A total number of 250 participants attended the conference including international delegates from countries viz., Germany, Nigeria, Nepal, Philippines, Namibia, Fiji, Bangladesh, Indonesia, Sri Lanka, New Zealand,



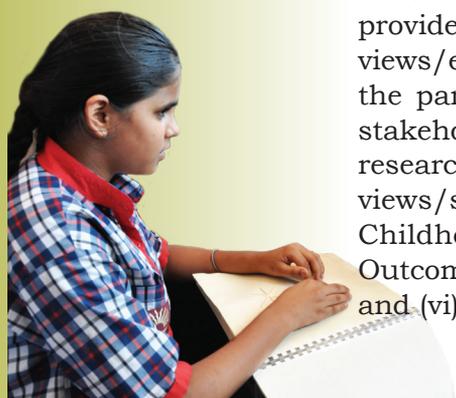
South Africa and USA. Besides the officials from MHRD, experts from various national organisations including NSDA, NSDC, SSC, NIOS, IGNOU, Manipal City and Guild, EduSport and Directorates of various states implementing NSQF participated in the conference. The experts from international organisations included UNESCO-UNEVOC, International Labour Organisation (ILO), Commonwealth Educational Media Centre for Asia (CEMCA), and University of Cologne, Germany. There were seven keynote addresses, eleven invited lectures and seventy-two presentations in parallel technical sessions. The paper and poster presentations were organised in parallel sessions. Recommendations were drawn out to carve the 'Vision 2025' for TVET which stated that TVET research needs to identify and evaluate the impacts of training, assessment and outcomes in terms of access, equity, social cohesion and social inclusion and need to take more dynamic view of the qualitative aspects of TVET. It also recommended that National Research Network on TVET in India should liaison with other countries viz., Australia, Germany, France and VETNET.

#### ***National Seminar on Improving Learning Outcomes at School Level***

A national seminar on 'Improving Learning Outcomes at School Level' was organised by NERIE at North-Eastern Council (NEC) Secretariat, Shillong, Meghalaya, from 15 to 16 October 2014 in collaboration with North-Eastern Council, Shillong. The major objective of the seminar was to create a platform wherein the major stakeholders of school education, including the practicing teachers, researchers, policy-makers, members of civil society organisations, parents, students and administrators deliberated on the issues associated with school education and came out with a set of concrete suggestions/recommendations which could serve as base for formulating plan for improving learning outcomes among school children of North-Eastern Region. As many as 170 delegates attended the seminar. The following major issues associated with school education of the country, in general and that of N-E Region, in particular were discussed through paper presentation, brainstorming, focus group discussions, question-answer, lectures and open-house discussion:

- ❑ Implementation of policies for improving students' learning
- ❑ Role of stakeholders in improving student learning
- ❑ Research and innovative practices on dimensions of quality education
- ❑ State/levels of learning in curricular areas
- ❑ Challenges and issues of access, equity and inclusion in school education
- ❑ Status and quality of teachers and teacher education programme, etc.

A technical session on 'Reflections on Educational Issues and Recommendations' was held towards the end of the seminar with a view to provide an open forum to the participants to reflect, question and share their views/experience on dimensions of school education. Besides open discussion, the participants were divided into six groups, each comprising of various stakeholders of education such as administrators, teachers, teacher-trainers, researchers, NGO functionaries and students, to deliberate and submit their views/suggestions on six major issues, viz., (i) Teacher Performance; (ii) Early Childhood Care and Education (ECCE); (iii) Improving Student Learning Outcomes; (iv) Inclusive Education; (v) Use of ICT in Teaching Learning Process and (vi) Skills Education.





*National Workshop on Language Pedagogy organised by DEL at NIE, New Delhi*

### ***National Workshop on Language Pedagogy***

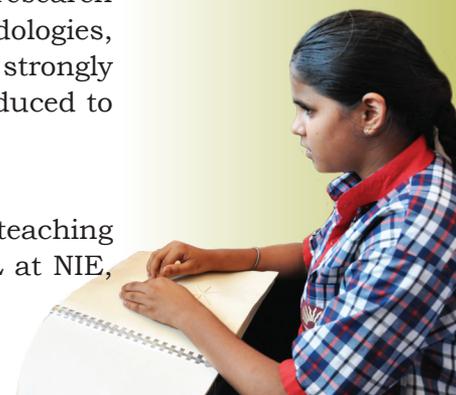
National Workshops on Language Pedagogy was organised by Department of Education in Languages from 10 to 14 November, 2014 and 16 to 20 March 2015 at NIE, New Delhi. Professor Ganesh Devy, renowned linguist, inaugurated the workshop and highlighted the importance of mother tongue of children in learning. He also expressed grave concern about the endangered status of minor, minority and tribal languages. The major objectives of the workshop were to highlight emerging approaches and methodologies of language learning and consequently developing materials to accommodate the needs of the diverse learners. Teachers, SCERT personnels, academicians and researchers participated in the workshop. It was recommended that mother tongue-based multilingualism should be promoted to make the learning of children effective. This will be instrumental in saving the minor, minority and tribal languages from extinction.

### ***National Conference on Language and Inclusive Education***

The national conference on Language and Inclusive Education was organised at NIE, New Delhi from 10 to 12 March 2015. In his key note address, Professor Awdhesh Kumar, IGNOU, explored the historical perspective of language learning, role of translation and media in evolving of languages and developing understanding of language learning. The major objective of the conference was to create a platform for creating awareness and discussing strategies for inclusive language education. The major issues focused were language curriculum adaptations for inclusive education, language teaching-learning process in the light of RTE and CCE for inclusion, integration of media for language and inclusive education and strategies for inclusion of marginalised groups. Teachers, teacher-educators, academicians, research scholars participated in the conference and presentations on methodologies, approaches, materials, teacher's attitude and profile of learners. It was strongly felt that children with language-related impairment should be introduced to standard sign languages.

### ***Celebration of Sanskrit Week***

Sanskrit week was celebrated to mark the significance of Sanskrit teaching and learning in schools. Following activities were organised by DEL at NIE, New Delhi during the celebration of Sanskrit week :



- **National Seminar-cum-Workshop on Challenges of Teaching-Learning Sanskrit**

Professor Radha Ballabh Tripathi, Ex-Vice Chancellor, Rashtriya Sanskrit Sansthan, New Delhi inaugurated the National Seminar-cum-Workshop and delivered the key note address on the need to standardise the words used in Sanskrit which are being borrowed for explaining contemporary issues and concepts. This was in consonance with the idea of the evolving Sanskrit literature with changing times. Forty-eight participants from different states and UTs namely Delhi, Uttarakhand, Uttar Pradesh, Bihar, Odisha, Gujarat, Rajasthan, Haryana, Madhya Pradesh, Telangana, Chhattishgarh, Jharkhand, Karnatak, Daman and Diu, Kerala, Tamil Nadu, Punjab and Himachal Pradesh comprising teachers, teacher-educators and resource persons participated in the programme. The workshop pointed out the major challenges in teaching-learning of Sanskrit at school level like, lack of proper Sanskrit teachers, allocation of less time for Sanskrit teaching, improper placement in the curriculum, misunderstandings regarding employment opportunities, lack of self-esteem among the Sanskrit learners, etc. It was recommended to organise workshops on linking Sanskrit with other disciplines. The need was also felt to develop e-contents for Sanskrit teaching and learning. Recommendations were made to initiate to establish a Sanskrit Cell at NIE, New Delhi to promote Sanskrit research and its linkages with other subject areas.

- **Release of Supplementary Book and Audio-Visual Materials**

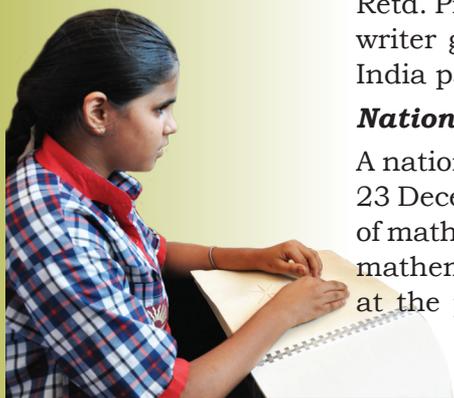
Hon'ble Minister of Human Resource Development, Smt Smriti Zubin Irani, released NCERT's publications, Vedparijat (Introductory book on Vedic Literature), Vatayanam (Audio of Sanskrit Stories), Vatayanam (Video of Sanskrit Stories) and Chhandovilasah (Video of Sanskrit *Chhandas*) at Sarvapalli Radhakrishnan auditorium, K.V. 2, Delhi Cantt. Shri Rajarshi Bhattacharya, Secretary, School Education and Literacy, Govt. of India, MHRD, Shri J. Alam, Joint Secretary, School Education and Literacy, Govt. of India, MHRD, Chairman, CBSE, Commissioner KVS and Professor B.K. Tripathi, Acting Director, NCERT along with number of dignitaries graced the occasion.

**National Seminar on 'Saanjhi Sahadat aur Saanjhi Virasat' in Hindi-Urdu Literature**

A national seminar on 'Saanjhi Shahadat aur Saanjhi Virasat' was organised at RIE, Bhopal on 28-29 March 2015. The objectives of the seminar were to remember and feel the commonness at one stage, understand the heritage and martyrdom of our common tradition, maintain the social harmony in our society and maintain the national unity and integrity. Professor Atul Kumar, Retd. Professor, Delhi University and Mr Iqbal Majeed, an eminent Urdu fiction writer graced the occasion. About 50 scholars and dignitaries from all over India participated in the seminar.

**National Meet on Mathematics Education**

A national meet on mathematics education was held at RIE, Bhopal from 21 to 23 December 2014. The objectives of the meet were to share the understanding of mathematical cognition at early childhood, to develop strategies for nurturing mathematical cognition and to share problems faced in teaching mathematics at the primary level. The meet was inaugurated by Professor G. Ravindra,



Former Director of NCERT and was presided over by Professor B. K. Tripathi, Acting Director, NCERT. The main theme of the meet was 'Mathematics Cognition'. The sub-themes were: 'Constructivism and Connectionism in the Learning of Mathematics'; 'The Psychology of the Learner, Mathematics Learner in Particular'; 'The Cognitive Aspect of the Mathematics at Pre-school, Elementary, Secondary and Tertiary Level'; 'Math-anxiety Affective Aspects and Identity in Mathematics Learning'; 'Mathematics Learning and Culture'; and 'as a Mathematics Teacher What do I Look at in the Mathematics Learner in Particular?'. Thirty-six research papers were presented, besides the invited talks on constructivism, mathematics culture, ICT in teaching mathematics, identity of the learners and Geo-gebra.

#### ***Regional Meet on Science Education***

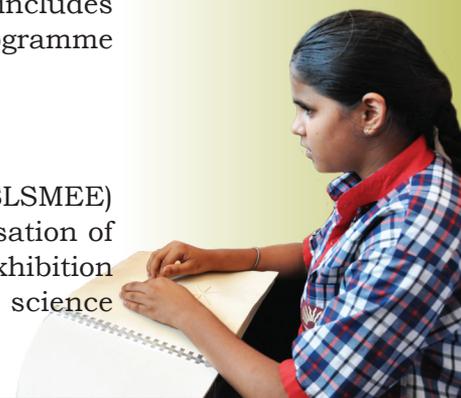
Regional meet on science education was organised on the occasion of National Science Day on 28 February 2015 by RIE, Bhopal. The objectives of the meet were to promote science education integrating content, pedagogy and technology, share the understanding and experiences on scientific research and innovations cutting across different disciplines of science, promote environmental awareness through science education, encourage research on science education, promote understanding about innovative practices in science education and evolve strategies for inculcation of scientific attitude and temperament. Papers were invited on various sub-themes on science education: constructivist approach in science education; inter-disciplinary approach in science education; innovative practices/experiments in science education viz., botany education, zoology education, physics education, chemistry education, life science education, environment education; and science education and sustainable development. In his key note address on 'Physics Education Research', Professor H.C. Pradhan, DAE Raja Rammanna Fellow, Homi Bhabha Centre for Science Education, T.I.F.R., Mumbai, dwelt at length on laboratory development, knowledge organisation, student's alternative concepts and methods of classroom instruction. Professor A. K. Gwal, Ex Professor of Barkatullah University, Bhopal talked on 'Historical background of science teaching in India'. Delegates across the country presented 46 papers on the various themes on science education.

#### ***Regional Seminar on Current Practices in Guidance and Counselling at the Secondary Schools of the Southern India***

RIE, Mysore organised regional seminar on current practices in guidance and counselling at the secondary schools on 9-10 October 2014. The edited papers and proceedings of the seminar are published in the form of a book entitled Recent Practices in School Guidance Programme. This book includes 40 edited articles on different issues related to School Guidance Programme at Secondary Level.

#### ***State Level Science, Mathematics and Environment Exhibitions (SLSMEE) for Children***

The State Level Science, Mathematics and Environment Exhibition (SLSMEE) for children 2014-15 is the first phase of preparation for the organisation of Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNSMEE) for children-2015. Its objectives are: (i) to popularise science



and mathematics and to create awareness about environmental issues and concerns; (ii) to provide opportunity for children to develop their scientific talent; (iii) to provide a forum for children to pursue their natural curiosity, creativity and inventiveness; (iv) to stimulate spirit of exploration in developing suitable technology by the application of scientific and mathematical principles to everyday life situations; and (v) to strengthen state level exhibitions in States/UTs.

The theme for state level exhibition in all States/UTs/Organisations during 2014-15 was 'Science and Mathematics for a Sustainable World' covering areas such as (i) Community Health and Environment; (ii) Landmarks in Science and Mathematics; (iii) Information and Communication Technology; (iv) Energy-Resources and Conservation; (v) Transport and (vi) Waste Management. The topic for the organisation of one-day seminar during 2014-15 was 'Indigenous Technology for Inclusive Growth'. Guidelines for the preparation of exhibits and models and organising SLSMEE 2014-15 and 42nd JNSMEE 2015 were developed and printed. This was forwarded to all stakeholders in all States/UTs and other agencies, and was also uploaded on NCERT's website for further dissemination. A two-day workshop with state level exhibition coordinators was organised during 5-6 June 2014 at NCERT, New Delhi. Catalytic grants to states and UTs for organising the state level exhibitions in their respective States/UTs were disbursed to 25 states and UTs. The progress for the organisation of exhibitions in all states and UTs was also monitored throughout the year. Reports of the exhibitions organised in many states/UTs have been received.

***Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children***

The 41st Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children was held at Chandigarh from 11 to 17 November 2014. The exhibition was inaugurated by the Hon'ble Chief Minister of Haryana, Shri Manohar Lal Khattar, on 11 November 2014. The inaugural function was also graced by Shri K. K. Sharma, Adviser to the Administrator of



*Children showing their science models at Jawaharlal Nehru National Science, Mathematics and Environmental Exhibition (JNNSMEE) held at Chandigarh in November, 2014*



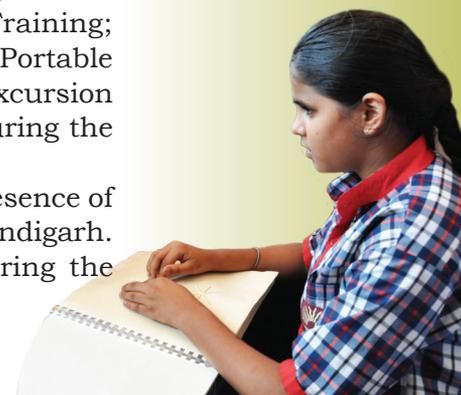
*Participant demonstrating science models at Jawaharlal Nehru National Science, Mathematics and Environmental Exhibition ( JNNSMEE) held at Chandigarh in November, 2014*

Union Territory of Chandigarh, Professor B.K. Tripathi, Director, NCERT, Shri Sarvjit Singh, Education Secretary, Chandigarh Administration and a host of dignitaries from Chandigarh Administration and NCERT.

Main theme of the 41st JNNSMEE 2014 was 'Scientific and Mathematical Innovations' with five broader areas viz., agriculture, energy, health, environment and resources. A total of 192 exhibits drawn from different states, UTs and other organisations (Kendriya Vidyalaya Sangathan, Navodaya Vidyalaya Samiti, CBSE-affiliated schools, Department of Atomic Energy Central schools, Demonstration Multipurpose Schools of NCERT, etc.) were exhibited and students were invited to participate in the national exhibition. Out of the total 192 exhibits, 143 were exhibited in the event. In all, 306 students (106 girls and 200 boys) from 180 schools contributed in developing the exhibits. The different departments of NCERT also showcased their work during the exhibition. The publicity material included booklets titled: List of Exhibits Selected; Structure and Working of the Exhibits; Exhibition Brochure in English and Hindi; and Guidelines for State Level Science, Mathematics and Environment Exhibitions, etc., which were provided to all participants and visitors. Besides, several other organisations, like Society for Promotion of Science and Technology; SCERT, Chandigarh; Science Centre, Kapurthala, Punjab; National Council of Science Museums, etc., also displayed their activities.

As part of the exhibition, lectures by prominent activists on Environment; Brain Mapping; Making Things with Mathematics; Mars Mission; Colour LEDs and White Light; Optical Nanoscopy; Robotics Show and Training; Science Experiments Demonstrations; Science Quiz; Laser Shows, Portable Planetarium, Hi-Speed Vehicles etc., was also organised. One-day excursion to Chandigarh city and cultural programmes were also organised during the exhibition.

The valedictory function was held on 17 November 2014 in the presence of Professor Manoj K. Arora, Director, PEC University of Technology, Chandigarh. Certificates and mementos were also given to the participants during the valedictory function.



**All India Competition on Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions**

The all India competition on innovative practices and experiments was introduced to encourage schools and teacher education institutions to tryout novel ideas and practices through team efforts for improving quality of school education and teacher education and to share their experiences with all other stakeholders. There is a provision for 30 awards, out of which 20 are for schools and 10 are for teacher education institutions, to be divided equally among the five regions as per the jurisdiction of each Regional Institutes of Education located at Ajmer, Bhopal, Bhubaneswar, Mysore and NERIE, Umiam, (Shillong).

Under the present scheme, project proposals are invited from schools/teacher education institutions on innovative practices. The project proposals are evaluated at two levels—RIE and NCERT. The schools/teacher education institutions whose project proposals were found to be innovative in nature were informed to carry out the innovation. Schools/teacher education institutions were visited for on the spot observation and guidance during the implementation of the project.

The schools/teacher education institutions are later invited to present the final report in the national seminar. Based on the combined rating of project report and its presentation in the national seminar, schools/teacher education institutions are selected for award. The cash award of Rs 20,000/- (Rupees twenty thousand only) along with a certificate is given to each selected schools/teacher education institutions.

The national seminar for the year 2013-14 was organised on 27 June 2014 at NIE, New Delhi and ten schools/institutions were awarded for the year. Selected innovative practices were disseminated.

**Schools/Institutions Awarded for the Year 2013-14**

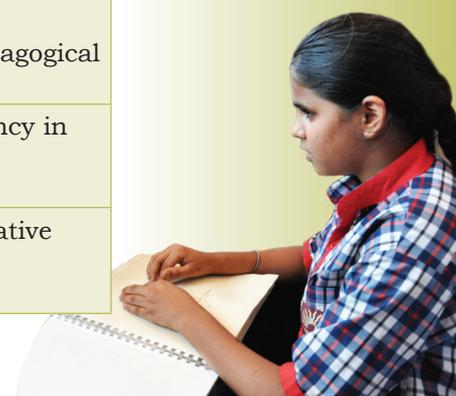
S. No.	Name of Schools/Institutions Awarded for the Year 2013-14	Title of the Project
1.	Govt. Senior Secondary School, Bhiwani Road, Rohtak, Haryana	Child’s Problems and Problems Child : Learn to Solve and Solve to Learn
2.	Babe ke College of Education, V.P.O. Mudki, Distt. Ferozepur, Punjab	Inculcation of Value of Respect for Female Gender through Value Oriented Activities
3.	B.C.M. College of Education Sec. 32 A, Urban Estate, Chandigarh Road, Ludhiana, Punjab	Effect of Mobile Learning on Achievement of B.Ed. Students
4.	District Institute of Education and Training, 20th Mile, Sonapat, Haryana	A Study of Impact of Induction Programmes upon the Professional Development of Teachers and Quality in Education
5.	Mount Tabor Training College Pathanapuram, Kollam, Kerala	Oratory Training for Student Teachers for Enhancing Communication Skills
6.	District Institute of Education and Training (DIET), Ernakulam Kuruppampady, Ernakulam District, Kerala	Development a Model of Peer Tutoring for Effective Implementation of Individualised Education Programme in Inclusive School



7.	District Institute of Education and Training (DIET), Oddanchatram Dindigul Distt. Tamil Nadu	Initiating an Orientation towards Neuro Cognitively Targeted Teaching Practices among the Students of Teacher Education Programmes at the Primary Level
8.	Excel Public School 1-C, Hootagalli Industrial Area, Belavadi Post, Mysore, Karnataka	Beyond the Blackboard
9.	Sri Tarachand Galada Jain Matriculation School, 44, Madley, 1st Street, T. Nagar, Chennai, Tamil Nadu	Integrating Cultural Formats and Artistic Expression in the Academic Life – Experiment and Education Initiatives
10.	Dighalgram Netaji Vidhyapith High School (HS), Vill/P.O. Dighlgram, Distt. Nadia, West Bengal	Development of Reusable Learning Contents and Interactive Student Response System with Optimal Information Technology

#### **Project Proposals Selected for the Year 2014-15**

<b>S. No.</b>	<b>Name of Schools/Institutions Awarded for the Year 2013-14</b>	<b>Title of the Project</b>
1.	Kerala Samajam Model School, Sakchi, Jamshedpur, Jharkhand	Stress to Wellness
2.	District Institute of Education and Training (DIET), Old Town, Keonjhar, Distt. Keonjhar, Odisha	Promoting Inclusive Classroom Practices Among Student Teachers in the Initial Teacher Education Programme Through Innovative Activities
3.	Govt. Secondary School Achchhapur, Post Hamirwas, Tehsil Rajgarh, Dist. Churu, Rajasthan	<i>Bal Manoshaktiyo ka Vikas</i>
4.	D.A.V. Public School, Pushpanjali Enclave, Outer Ring Road, Delhi	Decoding Maths
5.	Govt. Model Senior Secondary School, Sector 32-C, Chandigarh	Innovative Strategy for Teaching NCERT History Textbook (Themes in World History) at 10+1 Level
6.	District Centre for English Govt. B.H.S.S. Campus, Neyyattinkara, Thiruvananthapuram, Kerala	Integrated English for Tribes : An Evolving Method of English Language Acquisition
7.	School of Education Pondicherry University, Puducherry	Designing and Implementing a Blended Teaching-learning Programme for Improving Pedagogical Practices in Classrooms
8.	Acharya College of Education, No.3 Villupuram Main Road, Villianur, Puducherry	Development of ICT Competency in Pre-service Teachers
9.	KVM Red Hills High School 57, Chimney Hills, Chikkhavara, Bangalore, Karnataka	Multiple Intelligence in Innovative Teaching



### **National ICT Awards**

The centrally-sponsored scheme of Information and Communication Technology (ICT) in school was launched in December 2004. It aims to provide infrastructure and opportunities to secondary and senior secondary schools to develop ICT skills and also for providing ICT aided learning process. The MHRD-GOI has instituted 87 National ICT Awards for school teachers to facilitate those who have enhanced student learning by effectively and innovatively integrating technology-supported learning into the school curriculum and subject teaching and thereby promoted enquiry-based cooperative and collaborative learning using ICT amongst students. Award ceremony for the National ICT Awards, 2013 was organised on 5 September 2014 at Vigyan Bhawan in which nine teachers received award from the Hon'ble President of India. In all, 64 nominations were received for the year 2014 and the jury recommended names for the National ICT Award-2014 to MHRD-GOI. The advertisement for obtaining nominations for the National ICT Award-2015 has been released.

### **All India Children's Educational Audio-Video Festivals-2015**

The festival is organised to provide opportunity for exchange of ideas, innovative media programmes and to promote creativity among educational media producers, scriptwriters, students, teachers and technical personnel through contests, festival and exhibition. The 20th All India Children's Educational Audio-Video Festival was organised from 24 to 26 March 2015 at Central Institute of Educational Technology (CIET), NIE, New Delhi. Professor B.K. Tripathi, Director, NCERT inaugurated the festival. In this festival, 125 audio-video entries in the categories of primary, upper primary, secondary, senior secondary, teachers and new media were received and 44 audio-video entries were selected for its preview in the panorama section. Students, teachers, pupil-teachers, parents, eminent educationists, media experts, etc., participated in the preview sessions of audio-video programmes and they made valuable



*Inauguration of All India Children's Educational Audio-Video Festivals-2015 at NIE, New Delhi*

comments with respect to the programmes. Dr Ishtiyahq Ahmad, Director, State Institute of Educational Technology (SIET), Government of Uttar Pradesh, the Chief Guest of Valedictory Ceremony awarded the winners and distributed the prizes. Best programme awards in different categories were given for the following.

In the best programme awards of audio programme:

- ❑ Primary : *Andaza Lagao* (Hindi) produced by CIET, NCERT, New Delhi;
- ❑ Upper Primary : *Story of Tansen* (English) produced by CIET, NCERT, New Delhi;
- ❑ Secondary: *'Chitra Greevam'* (Telugu), produced by SIET, Hyderabad;
- ❑ Senior Secondary: *'Story of Insulin'* (Hindi), produced by CIET; and *'Phir Lauti Vidyalaya Gudia'*, produced by CIET, NCERT, New Delhi.

In the best programme awards of video category:

- ❑ Primary : *'Mere Aangan Ke Pakshi'* (Hindi) produced by SIET, Lucknow;
- ❑ Upper Primary: *'Alai Darwaza'* (Hindi) produced by CIET, NCERT, New Delhi;
- ❑ Secondary: *'Restart-Aadheyem Poothem'* (Malayalam) produced by C.K.G., Memorial HSS, Chingapuram, Kozhikode, Kerala;
- ❑ Senior Secondary: *'Malabaar Kalaapam'* (Malayalam) produced by CAM-TECH Tele movies, Thiruvananthapuram, Kerala;
- ❑ Teacher : *'Rajni Se Roshni'* produced by CIET, NCERT, New Delhi;
- ❑ New Media : *'Atomic Radius or Size'* produced by SIET, Hyderabad.

Under the individual excellence awards in audio programmes:

- ❑ Best Script award went to *'Sahakaram'* produced by SIET, Hyderabad;
- ❑ Best Sound Editing award went to *'Hajj-e-Akbar'* produced by CIET, NCERT, New Delhi;
- ❑ Best Direction award went to *'I Am Fire Ball'* produced by CIET, NCERT, New Delhi;
- ❑ Best Jury award went to *'Ephutna Torban Kaibagi Houraphamni'* (Manipuri) produced by SCERT, Manipur.

Under the Individual excellence awards in video:

- ❑ Best Script award went to *'restart aadheyem poothem'* (Malayalam) produced by C.K.G. Memorial HSS, Chingapuram, Kozhikode, Kerala;
- ❑ Best Camerawork went to *'New Life'* produced by SIET, Manipur;
- ❑ Best Editing award went to *'Ant Hills-Construction'* produced by SIET, Hyderabad;
- ❑ Best Set Designing award went to *'Razia Sultan'* produced by CIET;
- ❑ Best Sound Recording in studio went to *'Swami Vivekanand'* produced by CIET;
- ❑ Best Sound Recording award went to *'New Life'* produced by SCERT, Manipur;
- ❑ Best Effects award went to *'Indian Arm and Armour's'* produced by BHU Entertainment, Mumbai
- ❑ Best Direction award went to *'Majji—The One God Loves'* produced by Sh Syed Mohammed Naved, Okhla, New Delhi.



In all, 23 awards were given for best productions and individual excellence awards to audio and video programmes.

### **All India Poster, Photography and Video Contest for Students and Teachers**

The objective of these competitions was to promote and develop visual communication skills among teachers and students and to foster creative expression through digital photography. Photography contests for teachers and students were organised on selected theme 'Clean India' and sub-themes were 'Our School, Home and Around Us', 'Public Places', 'Public Transport'. In all, 600 entries were received from all over India. The best twenty-four in various sub-categories were selected for awards.

### **Centre for Popularisation of Science**

Popularisation of science being one of the thrust areas of NCERT, a 'Centre for Popularisation of Science' has been initiated under which there are three centres of attraction namely, 'Science Park', 'Herbal Garden' and 'Activity Room'



Visitors at the Science Park and Herbal Garden

- ❑ **Science Park** : It is an open air park in which working models provide a hands-on experience to understand and appreciate certain selected principles of science. During the year 2014-15, 'Science Park' received visitors from all over the country. Some schools and educational planners were provided guidance in developing similar models in their institutions. A 'Science Park Manual' which will help the visitors in understanding the working and scientific principles behind the exhibits/models displayed in the park is also being developed.
- ❑ **Herbal Garden** : Two herbal gardens, one with nearly 84 medicinal plants and the other meant for inclusive education where around 70 medicinal trees, shrubs and herbs were planted have been developed. A 'Herbal Garden Manual' and guidelines for developing similar garden has also been developed.
- ❑ **Activity Room** : It is used to demonstrate and explain how low cost activities can be performed in classroom in order to learn concepts of science and mathematics in a fun and easy manner.

### **Meeting of Nodal Members in Environmental Education to Prepare Plan of Action for the Environmental Orientation to School Education (EOSE) Scheme**

Meeting of nodal members in environmental education to prepare plan of action for the Environmental Orientation to School Education (EOSE) scheme was

held on 2-3 March 2015. Eleven nodal members from different RIEs, CIET and different departments of NIE attended the meeting.

### **Foundation Day Celebrations at NIE**

The 54th NCERT Foundation Day celebrations held on 1 September 2014 was based on the theme 'Gender Inclusion'. The celebrations at NIE, New Delhi were inaugurated by Hon'ble Minister of Human Resource Development, Smt Smriti Zubin Irani. Various activities in connection with celebrations were organised by the constituent units of the council.



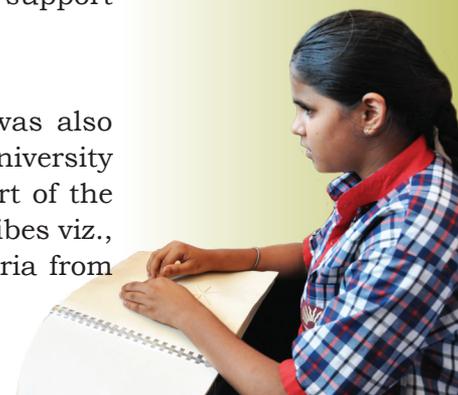
*Hon'ble HRM Smt Smriti Zubin Irani, addressing the students and faculty during 54th NCERT Foundation Day-2014*

- **Workshop on 'Learning Disability: Understanding the Gender Concerns'**

On the occasion of foundation day celebrations of NCERT, a workshop on 'Learning Disability: Understanding the Gender Concerns' was organised. Ms Geet Oberoi, from Orkids Foundation, Delhi acted as the resource person in the workshop which was attended by 70 participants representing various teacher-training institutions. The discussion focused on: What is learning disability, How to identify children with learning disabilities, Prevalence in school-going population, Manifestation of learning disability in boys and girls, Meeting of needs of children with learning disabilities in the regular classroom and the role of special educators in providing after school support and handholding of regular teacher.

- **Talk on gender and disabilities**

A sensitisation workshop on 'A talk on Gender and Disabilities' was also organised in which Dr Anita Ghai, Department of Psychology, Delhi University talked about issues related to the girl child with disabilities. As part of the programme, 70 posters related to tribal art and tattoo works of the tribes viz., Bhil, Gondi, Halwi, Mari, Muria, Santhali, Munda, Uraon, Ho, Kharia from Madhya Pradesh, Chhattisgarh and Jharkhand were exhibited.



- **Poster competition on gender and inclusive education**

A poster competition on gender and inclusive education was conducted to provide a platform to pupil-teachers to express their perspective on inclusive education and inclusive pedagogy. The poster entries for the competition were invited from teacher training institutes affiliated to SCERT, Delhi. Twenty-eight institutions including the DIETs as well as the self-financing institutes conducting the elementary teacher training course participated in the competition. One hundred and fifty-three poster entries were received from which ten merit certificate winning posters were selected. A video programme on science experiments done by secondary students with visual impairments was also shown.

- **Play: Gumnam**

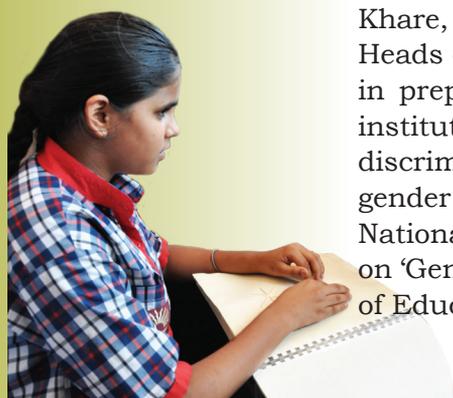
On the occasion, a play 'Gumnam' was enacted by VIRSA Arts Group, Delhi. Through the play, the issues concerning the struggle of transgender children were raised. Also, a competition was held at Kendriya Vidyalaya (NCERT) on Gender Issues in Education wherein children participated by preparing posters and slogans. The best posters and slogans were selected and awarded.

- **Book Exhibition and Story Telling**

A book exhibition was organised in which three exhibitors displayed books on 'Gender studies.' A mobile van from NBT showcased children's books that was visited by lot of readers with on the spot purchase. Bibliography was developed and displayed on 'Gender studies' along with display of new arrivals, current contents, book reviews and press clippings of the year 2014-15. Posters based on gender studies and famous women for their contribution to the society, a collage of events titled 'Journey of LDD', hand-made toys to represent 'Reading habit in a family' were displayed. The story tellers Manas Ranjan Mahapatra, Editor, NBT and Kshama Sharma, former Executive Editor, Nandan conducted story telling programme. Students of Classes IX, X, XI and XII and their teachers/librarians from Kendriya Vidyalaya, JNU and Navjeevan Sarvodaya Kanya Vidyalaya, Begumpur participated in the programme.

- **Foundation Day Celebrations at RIEs**

The RIEs celebrated 54th Foundation Day of NCERT as 'Gender Inclusion Day'. Lectures on the topic and competitions were organised. In RIE, Bhopal, Professor B.K. Kuthiala, Vice Chancellor, Makhanlal Chaturvedi National University of Journalism and Communication (MCNUJC), Bhopal was the Chief Guest on this occasion. Professor H.K. Senapaty, Principal, highlighted the role and function of NCERT in quality school education. Professor K. K Khare, Dean of Instructions, RIE, Bhopal outlined the achievements of NCERT. Heads of the departments expressed their views on the importance of NCERT in preparation of quality teachers and teacher-educators. Students of the institute presented a skit based on gender issues that highlighted the gender discrimination in society. In RIE, Mysore, NCERT's Foundation Day lecture on gender inclusion was delivered by Dr N. Shanta Mohan, former faculty from National Institute of Advanced Studies, Bangalore. In RIE Ajmer, the lecture on 'Gender Inclusion' was delivered by Professor Rita Arora, Head, Department of Education, Rajasthan University.



### **Science Day Celebrations**

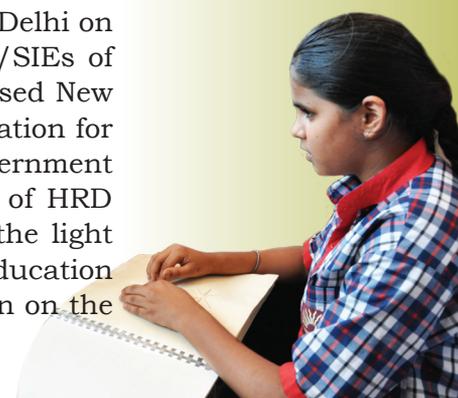
As part of the 'Science Day' celebrations held on 28 February 2015, teaching aids exhibition was organised and a regional meet on science education was also conducted by RIE, Mysore. Dr Balasubramanyam of Vivekananda Youth Movement of Mysore delivered the keynote address in the meet. The students of the institute and DM School participated in the meet which provided a platform to all the practitioners in science education to share their experiences. On the occasion of Science Day, RIE, Ajmer organised a Regional Consultation Meet-cum-Seminar on Science Education. Dr B.K. Tyagi, Scientist, Vigyan Prasar and Dr Pulin B. Chakraborty, former Chairman of NCSTC Network, delivered the keynote addresses. Thirty-two papers were presented in the seminar. Several science exhibits, models and teaching aids were presented by the students in science exhibition. RIE, Bhopal celebrated 'Science Day' on 10-11 February 2015. Major scientific activities organised during the occasion were presentation on interdisciplinary approach in teaching science, display of science kit: Make in India, debate on science on the themes modern technology is hallmark for development, demonstrations on working models in science, poster presentation on science and technology for nation building and science extempore on scientific concepts and science quiz.

### **International Week of Arts Education**

During the third week of May every year, member countries of UNESCO celebrate the International Week of Arts Education (IWAE). The Resource Centre for Arts and Crafts (RCAC) has been celebrating the IWAE since 2012. The event was celebrated in collaboration with Indira Gandhi National Centre for Arts (IGNCA), Sangeet Natak Academy – Kathak Kendra, Bachpan (an organisation for building knowledge through storytelling, narration and illustration) and Abhigyan Natya Theatre (Educating children from the underprivileged section through theatre). Teachers and children from different organisations participated in workshops on (i) Kathak dance, and (ii) Madhubani paintings on themes such as, animal, deities, village life under the guidance of the traditional artists from Bihar (iii) Storytelling-narration creation and illustration were done by the children. The theme of the story was shaped according to the direction given by the audience. Tempered with songs, rhythmic jingles and imagination of children, the celebration brought out messages on social values. Performances on the theme 'Literacy' concluded the three-day long celebrations.

### **Conference of Directors of SCERTs/SIEs**

Conference of Directors of SCERTs/SIEs is organised every year to share the significant achievements, issues and challenges in the field of school and teacher education. A two-day conference was organised at NIE, New Delhi on 2-3 March 2015 in which 25 Directors/representatives of SCERTs/SIEs of States/UTs participated. The focus of the conference was the proposed New Policy of Education (NPE) on the theme of Revamping Teacher Education for Quality Teacher. In the conference, Ms Vrinda Sarup, Secretary, Government of India, Department of Schools Education and Literacy, Ministry of HRD interacted with the participants. The agenda of the conference in the light of the new proposed education policy was (i) Sharing of teacher education in states – status, achievements, issues and concerns, (ii) Discussion on the



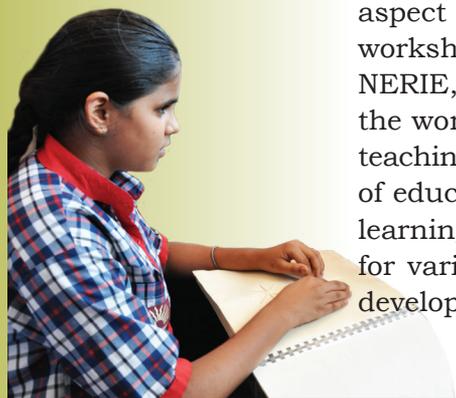
draft performance indicators (PINDICS) for elementary school teachers and (iii) Sharing of programmes and activities of NCERT constituents.

### ***Regional Review Workshops on Performance Indicators (PINDICS) for Elementary School Teachers***

Indicators for assessing the teacher's performance especially in the light of provisions for RTE Act have been developed. The other documents like SSA Framework 2011, INSET Study and Quality Monitoring Tools (QMT) were used for fine tuning the indicators. The PINDICS was developed in consultation with a group of experts, teacher educators, administrators and teachers and were tried out in the elementary schools of Delhi, Uttar Pradesh and Haryana. The draft indicators were sent to SCERTs, Boards of Schools Education and SPDs of SSA for their comments and suggestion and were also shared with NCERT faculty. The PINDICS were further revised based on their suggestions. It has also been linked to Quality Monitoring Tools (QMTs) for assessing learner's outcomes. Performance indicators can be used for self-assessment by the teachers for their improvement. CRCC/BRCC or other supervisory staff can also use it for assessing the performance of teachers and support them through appropriate teacher development programmes. The draft document provides brief explanation about the performance standards, specific standards and performance in accordance with their levels. It also describes the procedure to use PINDICS for assessing level of performance. The performance standards included in the draft are designing learning experiences, knowledge and understanding of subject matter, strategies for facilitating learning, interpersonal relationship, professional development, school development and teacher attendance. Academic support was provided to states/UTs regarding the development, finalisation and implementation of PINDICS during the regional workshops organised at NIE, New Delhi for northern and western regions, at RIE, Mysore for southern region, at SCERT, Guwahati for North-Eastern Region and at RIE, Bhubaneswar for eastern region under SSA. It was also shared with SPD-SSA and SPO and SSA (Pedagogy) coordinators from 36 States/UTs in the review workshop on planning and implementation of Comprehensive Quality Improvement programme organised by MHRD on 16 January 2015 at New Delhi. The PINDICS is revised and have been finalised on the basis of the suggestions and feedback received.

### ***Regional Workshops on Greening of the Elementary Schools for States and UTs***

To obtain the views of different stakeholders and make them aware about the aspect of greening and education for sustainable development, two regional workshops were organised for different stakeholders at NIE, New Delhi and at NERIE, Umiam (Shillong). More than twenty States and UTs participated in the workshop. Opportunities were provided to reflect and review the existing teaching-learning practices and school infrastructure to bring in the perspective of education for sustainable development and go beyond the classroom, link learning with the daily life of children and involve community and take action for various environmental issues in the surroundings to ensure the overall development of children as envisioned under the RTE Act.



### ***Awareness Generation Programme for Early Childhood Care and Education (ECCE)***

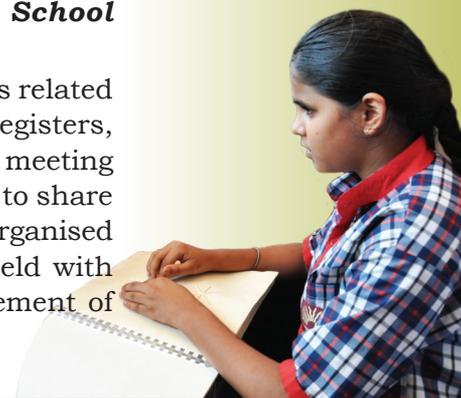
In order to create awareness on Early Childhood Care and Education (ECCE) among the various stakeholders, two awareness generation programmes were organised from 5 to 7 November 2014 at Dehradun and 24 to 27 February 2015 at New Delhi. About 58 ECCE functionaries from various institutions like SCERT, DIETs, SSA and ICDS of different States/UTs, working in the area of ECCE participated in the programmes. The States and UTs of Himachal Pradesh, Uttar Pradesh, Chhattisgarh, Madhya Pradesh, Gujarat, Arunachal Pradesh, Sikkim, Mizoram, Assam, Jammu and Kashmir, Rajasthan, Andaman and Nicobar Islands, Karnataka, Andhra Pradesh, Kerala, Delhi and Uttarakhand participated in the programme. The objectives of the programme were to sensitise teachers and parents about the importance of ECCE for strong foundation of learning and growth. Participants were provided opportunity to visit ECCE centres namely, Ladpur and Nanurkheda at Dehradun and Adhchini at Delhi. Charts, posters, banners, hoardings, stickers and slogans were developed by the participants to facilitate awareness generation activity at the local level. They were also oriented in the development and handling of different types of puppets as puppetry is considered one of the most effective ways to sensitise people. The participants also developed a state-wise plan of action to organise similar programme in their respective states.

### ***Early Childhood Education Programme in D. M. Schools at RIEs***

The RIEs conducts Early Childhood Care and Education (ECCE) programme as a part of promoting early childhood education programme activities regularly in the D.M. Schools. Under this programme, school readiness activities viz., numeracy readiness and reading readiness activities in the form of games and rhymes. In RIE, Mysore, the admission committee meeting was initiated on 1 May 2014 for admissions to ECCE for the academic year 2014-15. The deployment of human resource was done by appointing two ECE teachers. The orientation for new teachers was conducted in a workshop held from 11 to 16 July 2014. The face-to-face meeting with the parents was also conducted. The learning material and instructional designs were tried out in the first week of August 2014. The support material required for ECCE activities were purchased in August 2014. In RIE, Ajmer, *Muskurata Bachpan*, a research oriented programme based on the students of age group between 4-5 years old was organised. Emphasis is laid down on the development of language, mathematics, cognitive activities, creativity and skills among children. Individual records of students were prepared as base work.

### ***Academic Support to IIT Nursery School: An Experimental School of NCERT***

Academic support is provided to IIT Nursery School on various aspects related to ECCE such as admission procedures, maintenance of records and registers, assessment, teaching-learning processes and material development. A meeting was organised in the school to assess the needs of teachers as well as to share experiences in these areas. Thereafter regular monthly meetings were organised to discuss issues related to ECCE as per plan. Discussions were held with teachers on various topics such as 'How do children learn', 'Involvement of



Parent in ECCE', 'Language Development' and 'Cognitive Development', 'Socio-emotional Development', 'Art and craft activities' and 'Programme Planning in ECCE' with some hands-on experience etc. An orientation programme for parents on holistic development of children was also organised.

#### **Organisation of National Resource Group Meeting for SSA**

A National Resource Group (NRG) was conceptualised by MHRD for evaluating and sharing the academic activities organised at the national level for improvement of quality of elementary education under SSA. Since its inception, nine meetings of NRG have been held. Approved minutes have been regularly sent to all the NRG members, all SPDs and SCERTs/SIEs for taking necessary action on the recommendations of NRG.

#### **Academic Support to Union Territories without Legislature on Improvement and Management of Quality Elementary Education**

NCERT being the academic authority for implementation of Right of Children to Free and Compulsory Education Act, 2009, extends its support to the Union Territories of Andaman and Nicobar Islands, Chandigarh, Dadra and Nagar Haveli, Daman and Diu and Lakshadweep. A workshop was organised to help the UTs to understand and resolve the academic issues related to the latest interventions/initiatives for improving the quality of elementary education like Continuous and Comprehensive Evaluation, Learning Indicators, Curricular Adaptations for Inclusive Education, Science and Mathematics Education, Achievement Surveys and Performance Indicators for Teachers (PINDICS). A three-day workshop was conducted from 16 to 18 December 2014 which was attended by participants from Andaman and Nicobar Islands, Chandigarh and Delhi.

#### **Academic Support to States and UTs in Implementing Learning Indicators and CCE at the Elementary Level and Teacher Performance Indicators for Teachers**

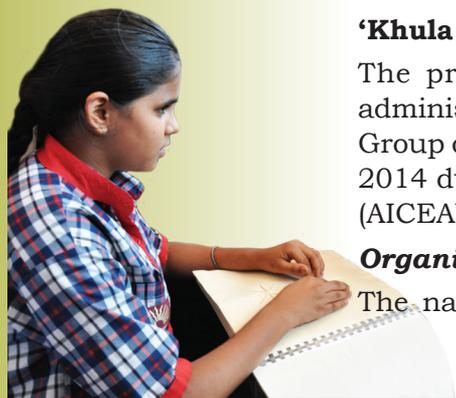
Five regional workshops were organised to cover all the States and Union Territories. The workshops for northern and western region were organised on 8-10 October 2014 and 3-5 December 2014 at NIE, New Delhi and the regional workshops for eastern and southern region were organised at RIE, Bhubaneswar and RIE, Mysore, respectively. The North-Eastern regional workshop was held at SCERT, Guwahati from 3-5 December 2014. The workshops were interactive and states were given enough time to share their experiences and difficulties in developing and implementing learning indicators and performance indicators for teachers. The report for each regional workshop has been prepared and consolidated to provide a national perspective.

#### **'Khula Aakash': A Video Film of Early Childhood Care and Education**

The programme was developed to sensitise the teachers, educational administrators, parents and the community about the vision of National Focus Group on ECCE, as per NCF-2005. The video programme got national award in 2014 during 19th All India Children's Educational Audio Video Festival 2014 (AICEAVF) organised by CIET, NCERT at Thiruvananthapuram.

#### **Organisation of National Role Play and Folk Dance Competition**

The national role play competition was organised for Class IX students of



government schools of States/UTs. In the competition, four major themes having seven citations were phrased (healthy relationships among adolescents, charms and challenges of adolescence, HIV/AIDS: stigmatisation and cause and impact of drug abuse). The number of role players in each situation were four or five and duration of the role play competition was five to seven minutes. The languages used in the role play were Hindi and English. The competitions were held at four levels, i.e., school, block, district, States/UTs and national level.

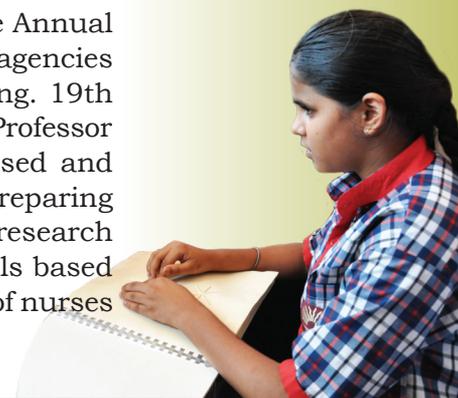
The national level competitions of role play and folk dance were organised by the NCERT for Northern, Eastern and North-Eastern Regions at NIE, New Delhi on 8-9 and 11-12 December 2014 and for Southern and Western Regions at MSCERT, Pune, Maharashtra on 15-16 and 18-19 December 2014, respectively. In the competitions, Demonstration Multipurpose Schools of RIEs also participated. The observations made by participating students and teachers' shows that it is an effective activity for enabling children to develop life skills and also for creating a congenial environment for AEP. A similar programme, namely, the national folk dance competition was also organised in the same pattern of role play competition. In role play competition, 364 districts were covered and in folk dance competition, 289 districts were covered. The themes for folk dance competition were equal opportunity for boys and girls, respect and care for elders, protection of the environment, drug abuse and charms and challenges of adolescents.

#### ***Art Camp and Sensitisation Workshop***

The Resource Centre for Arts and Crafts organised art camps with an objective to preserve heritage and culture through experiencing traditional art forms of the country and its pedagogical implications. A ten-day art camp of Dokhra Metal casting was held at NIE, New Delhi from 10 to 19 November 2014. Traditional craft persons from Mednipur, West Bengal conducted the workshop for 42 teacher-educators from Haryana, Uttarakhand, Himachal Pradesh, Delhi, Punjab and Jammu and Kashmir. A workshop was conducted at RIE, Ajmer from 9 to 14 February 2015 to bring awareness among pupil-teachers about Cane and Bamboo crafts of Assam. Also, sessions co-relating arts to language, science, geography, economics, history, etc., were organised for understanding the wider aspects of the art form. Programme resulted in the development of a number of products by the participants with bamboo sticks. Students made different utility items and there was a new sense of appreciation towards this heritage craft from north-east.

#### ***Project Progress Review Meeting***

Project Progress Review Meeting for Adolescence Education Programme (AEP) was held at NIE, New Delhi, on 3-4 December 2014 to review the activities planned by all national agencies for the year 2014 and to prepare the Annual Work Plan (AWP) of AEP for the year 2015. Officials from national agencies (KVS, NVS, NIOS) including NCERT and UNFPA attended the meeting. 19th Project Finance and Monitoring Committee (PFMC) meeting chaired by Professor B.K. Tripathi, Director, NCERT held on 30 December 2014 discussed and approved AWP of AEP for the year 2015. The focus of AWP was on preparing materials, training teachers of KVS and NVS schools, developing a research design for content analysis; advocacy and organising various life skills based activities. Interactive workshop for KVS and NVS officials and training of nurses



and teachers in counselling was also included with the AWP of AEP. Project Progress Review Meeting for National Population Education Project (NPEP) was organised at Amritsar, Punjab from 15-16 February 2015. All officials from 27 States/UTs, RIEs, Directors and Joint Directors of SCERTs/SIEs participated in the meeting.

***In-house Seminar-cum-Discussion Sessions***

Under this programme, a total number of ten seminar-cum-discussion sessions on fortnightly basis have been conducted by the Educational Survey Division, NIE, New Delhi. The faculty members and project staffs from various Department/Division/Cells of NIE attended these sessions. A compilation of the briefs of all ten presentations during the sessions under the programme is in the process of finalisation.

***Topics of In-house Seminar-cum-Discussion Sessions***

Sessions	Date	Topics	Speakers
Session 1	14 October 2014	Achievement Surveys: Purpose, Process and Role in Feedback Mechanism to Education System	Dr A. D. Tewari
Session 2	30 October 2014	Analysis of Piloting Data for Finalisation of Achievement Tests Across the Languages	Dr Santosh Kumar
Session 3	17 November 2014	Educational Standards, Quality and Accountability	Professor Y. Sreekanth
Session 4	16 December 2014	Use of Matrix Sampling in Item Response Theory – Advantages and Limitations	Dr Indrani Bhaduri
Session 5	30 December 2014	Development of Achievement Tests for National Achievement Surveys	Dr Veer Pal Singh
Session 6	14 January 2015	Development of Geo-Spatial Database on School Education – An Exploration	Dr Sukhvinder
Session 7	30 January 2015	Indicators for a Post 2015 Education Framework	Dr Satya Bhushan
Session 8	16 February 2015	Use of open Source Software for Analysis of Survey Data	Dr Gulfam
Session 9	27 February 2015	RTE Provisions on Availability of Schooling Facilities and AISES Data in Rural Habitations	Dr Vishal D. Pajankar



Session 10	30 March 2015	8th All India School Education Survey: The Aspects Covered and Available Indicators for School Education	Professor Sridhar Srivastava
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### **Apprenticeship Training**

The Division of Educational Kits imparted apprenticeship training to two apprentices from Electrician (General) and fitter trade as per guidelines from DGERT, RDAT Faridabad, Ministry of Labour. The two students underwent one year apprentice training as part of their ITI course. This apprentice experience provided them opportunity to bag good employment in the industry.

### **Book Exhibition**

Library and Documentation Division organised book exhibition on 16 October 2014. Many publishers had put up stalls and displayed titles of different subjects areas of school education. On the spot order for purchase of books were given by representatives of different NIE departments/divisions/cells.

### **An Awareness Programme on 'Importance of Copyright Act'**

An awareness programme on 'Importance of Copyright Act' on the eve of 'World Book and Copyright Day' was held at NIE, New Delhi on 23 April 2014. Professor Raman Mittal, Faculty of Law, University of Delhi delivered a lecture on this theme.

### **52nd Meeting of the Programme Advisory Committee (PAC)**

The 52nd meeting of the Programme Advisory Committee (PAC) was held at NIE, New Delhi on 26-27 March 2015. The meeting considered the programmes of all the Institutes/Departments/Divisions of NCERT for the year 2015-16. The committee also evaluated the progress of the programmes of NCERT during 2014-15.



52nd Meeting of the Programme Advisory Committee (PAC) of NCERT



### **Guidance Workshop on Implementation of CSS**

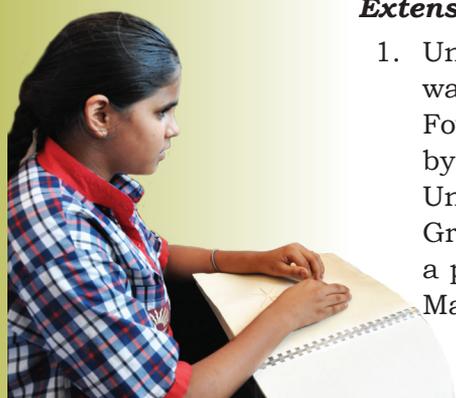
A two-day guidance workshop was organised by PSSCIVE, Bhopal on the implementation of Centrally Sponsored Scheme of Vocationalisation of Secondary and Higher Secondary Education (CSS of VSHSE) was organised on 30-31 July 2014 at the National Institute of Technical Teachers' Training and Research (NITTTR), Bhopal, on behalf of Department of School Education and Literacy, Ministry of Human Resource Development (MHRD). An open discussion was held on various issues related to the implementation of CSS of the scheme including infrastructure, scheme of studies, linkages with industry, role of NSDC and Sector Skill Councils in training, assessment, certification and placement. The experts namely, Ms Radha S. Chauhan and Dr Ankita Mishra from Ministry of Human Resource Development, representatives from National Skill Development Agency, National Skill Development Corporation, State Departments of School Education, State Boards of Education, Central Board of Secondary Education, Indira Gandhi National Open University, Institute of Applied Manpower Research, Sector Skill Councils and Civil Society Organisations were engaged in Skill Development interacted in the workshop.

### **National Prakriti Mela-2015**

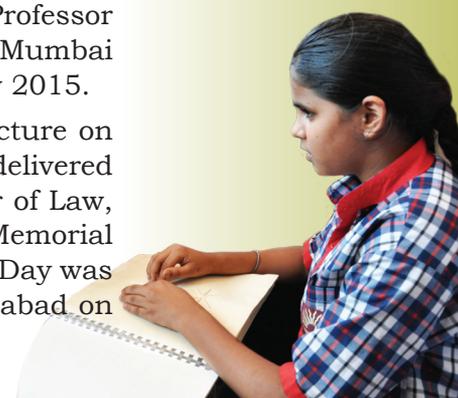
*Prakriti Mela* is an initiative of RIE, Ajmer and Centre for Environment Education, a centre of excellence under Ministry of Environment and Forest. The *mela* initiated in 2006-07, has become a major event for the region where schools come together to showcase their educational efforts in the field of environment and sustainability. The national event for the academic year 2014-15 was organised from 16 to 20 February 2015 at Ajmer. The event saw participation of shortlisted schools, students and teachers for *Paryavaran Mitra Puraskar*. This year *Prakriti Mela* had participation from various states viz., Assam, Andhra Pradesh, Bihar, Chhattisgarh, Delhi, Gujarat, Jammu and Kashmir, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Odisha, Punjab, Rajasthan, Tamil Nadu, Telangana, Tripura, Uttar Pradesh and Uttarakhand. There were around 200 participants including eco-club members of RIE, Ajmer. The participants from various states of the country got an opportunity to exhibit and present their work under the five themes: water and sanitation, energy, waste management, biodiversity, culture and heritage. The event was successful in spreading the message of taking affirmative action towards environmental conservation and also the need of sustained efforts to do the same. This helped in engaging students in project-based learning as envisaged in the *NCF-2005* and policy for environmental education.

### **Extension Lecture Series**

1. Under the extension lecture series held at RIE, Ajmer, the first lecture was arranged on 2 September 2014 in connection with the celebration of Foundation Day of NCERT. The lecture on 'Gender Inclusion' was delivered by Professor Rita Arora, Head, Department of Education, Rajasthan University. Second lecture on 'Educational Reforms' by Professor J.S. Grewal, Retired Dean of RIE, Bhopal was held on 11 November 2014, as a part of the celebration of National Unity Day. The third lecture by Dr Manoj Kumar of MDS University, Ajmer on 'Facing Interviews' mainly for



- the benefit of outgoing students who have to face interviews to get into jobs was held on 11 February 2015.
2. The extension lecture series programme at RIE, Bhopal was conceptualised with an intention to initiate the dialogue; generate thinking and discussions and to exchange views and ideas about different aspects of education; initiate the dialogue on the new trends/national priorities in education; and exchange views and ideas about the current scenario of school education. Under the series, the first lecture was organised on 25 February 2015 where Professor Surya Prakash Vyas, eminent scholar and former Head, Department of Jain-Bauddha Darshan, Banaras Hindu University, Varanasi delivered a lecture on 'Bhartiya Darshan Evam Jeevan Mulya.' A large audience comprising faculty and students of the institute and PSSCIVE, Bhopal, teachers from DMS and the invited guests from university and other educational institutions. Another lecture on 'History of Scientific Rationality' was organised on 27 February 2015 in the institute. Professor H. C. Pradhan, Professor and Director, Homi Bhabha Centre for Science Education (TIFR), Mumbai, delivered a lecture on the 'Development of Science since Ancient time till last Century'. In the series, Professor Sushmita Pandey, Head, School of Studies in Ancient Indian History, Culture and Archeology, Vikram University, Ujjain delivered a lecture on 'Indian Culture and its Multiple Interpretations.'
  3. The extension lecture series at RIE, Bhubaneswar was intended to contribute to the development of professional identity among the faculty, students of the institute and teachers of D.M. School by facilitating the process of knowledge sharing. Under the extension lecture series, six lectures were organised on the occasion of various national and international day of importance for the benefit of staff and students of the institute. All the lectures were followed by interactive sessions wherein students were given opportunity to interact with the experts on the concerned issues. The extension lectures were delivered by Professor P. K. Sahoo, Allahabad University, Allahabad delivered a lecture on 'Future of teacher education' on 5 November 2014, Professor D.R. Goel, CASE, Vadodara delivered a lecture on National Education Day on 11 November 2014, Professor V. B. Talwar, Professor of Hindi (Retd.), JNU, New Delhi spoke on 'Tribals in Indian Literature' on 13 November 2013, Professor B.N. Patnaik, Professor of English and Linguistics (Retd.), IIT, Kanpur delivered a lecture on 'The Chomskian approach to the study of language and mind' on 8 January 2015, Mr S. N. Sahoo, Joint Secretary, Rajya Sabha delivered a lecture on 4 February 2014 and discussed on various social issues with specific reference to environment and peace and Professor Nagarjuna Gadiraju, Tata Institute of Fundamental Research, Mumbai discussed on 'Constructivism to Connectionism' on 12 February 2015.
  4. Under the extension lecture series, RIE, Mysore organised a lecture on Dr B.R. Ambedkar on the occasion of 'Ambedkar Jayanti' was delivered by Dr C.K.N. Raja, Constitutional Expert and Retired Professor of Law, University of Mysore on 14 April 2014. Sardar K. M. Pannikkar Memorial Lecture was organised on the occasion of institute's Foundation Day was delivered by Professor T.V. Rao, Adjunct Professor, IIM, Ahmedabad on



1 August 2014. NCERT's Foundation day lecture on gender inclusion was delivered by Dr N. Shanta Mohan, former faculty from National Institute of Advanced Studies, Bangalore on 1 September 2015. The extension lecture on Unity, Integrity, Safety and Security of India was delivered by Professor M. Umamathi, Professor of Political Science (Retd.), University of Mysore on the occasion of 'Ektha Diwas' on 31 October 2014. The extension lecture on 'Unification of Karnataka and its relevance' delivered by Professor M. N. Talwar, Director, Kuvempu Institute of Kannada Studies, University of Mysore on the occasion of 'Karnataka Rajyothsava' (Karnataka State formation day) on 1 November 2014. Extension Lecture on 'Enhancing effectiveness in education' delivered by Professor P. Nagabhushan, Professor of Computer Science and Nodal Officer for Choice Based Credit System, University of Mysore on the occasion of 'National Education Day' on 11 November 2014. Professor C.P. Siddhashrama, Professor of Kannada, University of Mysore and Professor C. Sharathchandra Nair, former Principal, SRLC CIIL, Mysore delivered lectures on the occasion of 'International Mother Tongue Day' on 21 February 2015.

5. Two lectures under the extension lecture series were organised at PSSCIVE Bhopal in which Shri Dilip Chinoy, CEO and MD, National Skill Development Corporation (NSDC), New Delhi delivered lecture on Skill Development on 5 July 2014. Sh Raghu Pandey, Founder, iBranch. in and Trainer, Internet Maturity gave lecture on Internet Maturity on 5 September 2014. In all about 600 teachers, principals and other officials and key functionaries of Madhya Pradesh attended the above lectures.

#### **Educational Tour**

The students of B. Sc. B. Ed. IV year (Biological stream) went on study tour to Gulab Bagh Zoological Garden, Udaipur and Aquaculture and Fisheries Research Centre, Maharana Pratap University of Agriculture and Technology, Udaipur. The educational tour was part of their practical syllabus. More than 20 species were seen by the students in the zoological garden. The students got benefitted in terms of acquiring knowledge about their feeding habit, breeding season, etc., and also about various threatened species. The students got awareness of the legislations on environment and wild life protection, the role of wild life in sustenance of ecosystems and healthy life on the earth. The students were informed about the role of biotechnology and new technologies generated in the area of fish culture to increase the yield from the Aquaculture and Fisheries Research Centre, Maharana Pratap University of Agriculture and Technology (Aquaculture Research unit ) Udaipur, Rajasthan.

#### **Hindi Pakhwara at NIE and RIEs**

Hindi Fortnight Celebrations were organised in the Council during the month of September. At NIE, New Delhi it was organised from 2nd to 16th September 2014. Various competitions namely Noting and Drafting, Essay, Hand-writing, Translation, Typing, Debate, Poetry, Quiz and Hindi Letter writing and Essay (for employees of non-Hindi speaking areas) etc., were organised for the employees. 205 employees of the Council took part in the above competitions with great enthusiasm. The winners (44) were awarded cash prizes and commendation certificates.





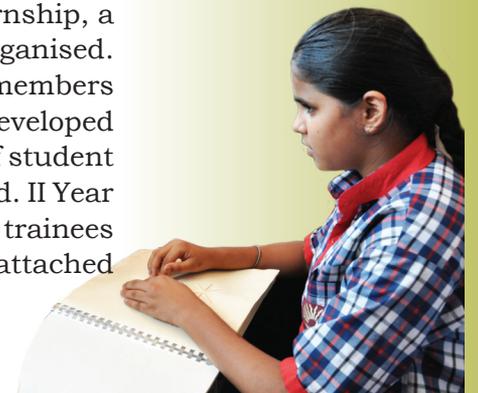
*The winners of 'Hindi Pakhwara' receiving cash prizes and certificates*

Hindi Pakhwara was celebrated from 8 to 22 September 2014 at RIE, Ajmer in order to enhance the use of Hindi in government offices. In order to use Hindi effectively, different competitions were organised for all officers, staff and students of the institute. The competitors who achieved first, second and third positions were awarded prizes by the principal. The Hindi week came to its end with the valedictory function graced by Professor V. K. Kakaria, Principal. He stressed on the need to strengthen the use of Rajbhasha Hindi in day-to-day work. Similar programmes were also organised at other RIEs at Bhopal, Bhubaneswar, Mysore and NERIE in which staff and family participated in various competitions. Cash awards were given to the winners of these competitions.

#### ***Internship Programme for B.Ed. Students at RIEs***

Internship in teaching is an opportunity where the student-teacher identifies herself/himself with the school to which she/he is assigned. The student-teacher participates in every activity of the school in the dimension of school life. All these were done under the guidance of headmasters of the schools, cooperating teachers of the schools and supervisors of the institutes along with other supportive staff members of both school and training institute.

RIE, Ajmer organised the Internship Programme for the B.Sc. B.Ed. IV Year from 8 August 2014 to 12 September 2014 and for B.Ed. II year teacher-trainees from 8 August 2014 to 23 September 2014. Prior to the internship, a conference of heads of all the ten selected cooperating schools was organised. All the students were oriented with the help of internship committee members and faculty of the institute. This year, a supervisors' diary was also developed and distributed to all the supervisors for recording the performance of student interns and their comments. The pre-internship programme of the B.Ed. II Year was also organised from 9 January 2015 to 9 February 2015. The trainees were oriented by the faculty of the various departments before being attached to DMS and government school in Vaishali, Ajmer.

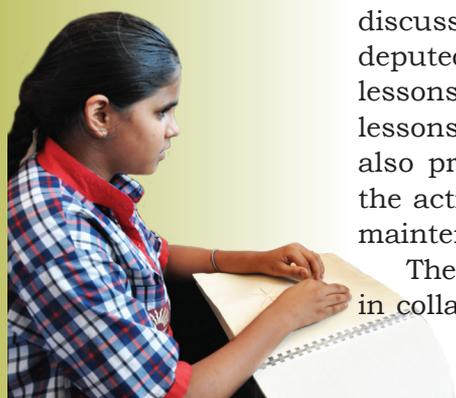


Internship in teaching programme at RIE, Bhopal for the students of B.Sc. B.Ed., VII Semester, B.A. B.Ed., VII Semester and B. Ed., II Year started on 11 July 2014. The duration of the internship in teaching programme for the students of B.Sc. B.Ed. and B.A. B. Ed. was five weeks and for the students of B. Ed. II year was eight weeks. The students were placed in JNVs of Dongargarh, Chhattisgarh Dahod (Gujarat), Bhusaval, (Maharashtra), Aranyakala and Ratibad, two KVs of Bhopal, Madhya Pradesh State government schools and DMS, RIE, Bhopal. Students' performance was evaluated during regular, criticism and final lessons. Constructivist approach was emphasised during the programme as per the recommendations of *NCF-2005*. The students submitted the records in the form of internship report; peer observation schedule; case study report; learning situation notes; and scholastic achievement and diagnostic test records.

Internship programme was organised at RIE, Bhubaneswar for VII semester B.Sc. B.Ed., B.A. B.Ed. students and B. Ed. III semester students separately. Internship in teaching for two-year B.Ed. was held at Bhubaneswar (Odisha trainees) and Durgapur, West Bengal (Outside Odisha trainees) from 7 July to 30 September 2014. The main purpose was to develop skills, competencies and attitude to teaching as well as schools. Two days conference for cooperating teachers was held on 3-4 July 2014 at RIE, Bhubaneswar for discussing different aspects of internship in teaching and roles and responsibilities of cooperation schools and teachers. Total 98 trainees were placed in different schools located at Bhubaneswar and Durgapur. Faculty members of the institute supervised the internship in teaching programme in different schools. Fifteen schools from Bhubaneswar were selected as internship centres. Students were divided into different groups based on their preferences and were allocated in one of the centres for their internship activities. The four-day pre-internship conference was organised from 1 to 7 July 2014. The principals/headmasters/teachers of the cooperating schools attended the same and the student-teachers were made aware of their duties and responsibilities. During the internship the student-teachers were engaged in different school activities along with teaching. Evaluation of the performance of student-teachers during internship was based on the assessment made by institute supervisors, cooperating school principals, teachers, peers, teaching and exhibition. After completion of the internship in different schools, the student-teachers organised a teaching-aid exhibition followed by post-internship conference.

Internship programme for B.A. B.Ed. students was held at Bhubaneswar from 7 July 2014 to 13 August 2014. A three-day pre-conference for cooperating teachers was held from 3 July 2014 to 5 July 2014 at RIE, Bhubaneswar for discussing different aspects of internship. Forty-seven student-teachers were deputed to seven different schools of Bhubaneswar. Each student taught 16 lessons each in social science and languages in their respective schools. Ten lessons, five in each method were observed by the student-teachers and they also prepared an observation record. Student-teachers participated in all the activities of the school such as assembly, cultural and sports activities, maintenance of library or labs, etc.

The Regional Institute of Education, Mysore organised internship in teaching in collaboration with the Navodaya Vidyalaya Samiti (NVS) in a partnership



mode for providing better experiences to the student-teachers which will help them to become quality teachers. The professional preparation of internship in teaching was provided jointly by NCERT and NVS for providing quality inputs to the student-teachers of B. Sc. Ed.; B. A. Ed. and M. Sc. Ed. (mathematics, physics and chemistry). The pre-internship was conducted from 16 to 25 June 2014 in the local schools. The pre-internship conference was organised for the institute faculty, teachers and principals of selected JNVs and student-teachers from 26 to 28 June 2014. The internship programme was organised in the 13 JNVs of Karnataka, Kerala and Puducherry from 30 June to 9 August 2014.

***Diploma Course in Guidance and Counselling (DCGC) through Distance/Online Mode***

The Diploma Course in Guidance and Counselling through Distance/Online Mode - 2014 commenced from 1 January 2014 at RIE, Bhopal. The programme was conducted in three phases—Distance Phase (January-July, 2014); Contact Phase (August-September, 2014) and Internship (October-December, 2014). Total 49 candidates took admission in the course, out of these, 37 joined the contact programme. Orientation programme and two tutorials for the trainees were held during distance phase. The tutors oriented the trainees on each course. The face-to-face phase started from 1 August 2014. The trainees were oriented by internal faculty and external resource persons on conducting different practical activities under guidance and counselling. The trainees conducted these activities in six schools in Bhopal city under the supervision of school supervisors. Workshops on gestalt therapy, cognitive behaviour therapy, learning disabilities and Solution Focused Behaviour Therapy (SFBT) were organised by the experts during the contact programme. Two career exhibition-cum-conferences for the students of Classes IX to XII were also organised at Anand Vihar School on 6 September 2014 and at RIE, Bhopal on 11 September 2014. The audio/video material developed by the trainees was displayed in the exhibition and professionals were invited to deliver talk on various upcoming careers. Two field visits were also organised, one at Rural Development and Self Employment Institute and another at PSSCIVE, Bhopal. The evaluation of the knowledge and skills acquired during the course was assessed through written evaluation, counselling seminar, portfolio presentation, viva-voce and presentation of internship project report. The contact phase concluded on 30 September 2014. The internship phase was conducted from 1 October 2014 to December 2014. The trainees presented their internship work in a seminar held on 28-29 January 2015.

***Celebration of the Birth Anniversary of Srinivasa Ramanujan***

Birth anniversary of Srinivasa Ramanujan was observed on 22 December 2014 at RIE, Bhopal wherein the life and works of Ramanujan were highlighted. There were 103 participants in all during the three-day programme. Students of RIE, Bhopal organised an exhibition displaying the history of mathematics and mathematicians with special reference to women mathematicians of the world. Professor G. Das, former Vice-chancellor and a mathematician, gave the valedictory address.



### ***Celebration of Babasaheb Ambedkar Jayanti***

The 124th Jayanti of Dr B.R. Ambedkar was celebrated on 14 April 2015 at RIE, Bhopal. The students gave presentations on various aspects of Dr B.R. Ambedkar's life focusing on his education, career and contribution to the Constitution of India and as a social reformer. Faculty also shared their views on Dr B.R. Ambedkar's life and contributions. Professor H.K. Senapaty paid tribute to Dr B.R. Ambedkar in his speech, attributing him to be a great leader, social reformer and educationist.

### ***Foundation Day of RIEs***

The 51st Foundation Day of the RIE, Bhopal was celebrated on 31 July 2014. Professor M. D. Tiwari, Vice-chancellor, Barkatullah University, Bhopal graced the occasion as Chief Guest. As a tradition of honouring senior staff members of the institute Dr P. K. Kulshrestha and Shri A. G. Jagtap were honoured. They shared their experiences of serving in RIE, Bhopal. Professor Reeta Sharma, Dean of Instructions, outlined the past traditions of the institute. Trees were planted on this occasion. Sardar K.M. Pannikar Memorial Lecture on the occasion of RIE, Mysore Foundation Day was delivered by Professor T. V. Rao, Adjunct Professor, IIM, Ahmedabad on 1 August 2014.

### ***National Education Day***

RIE, Bhopal remembered our first Education Minister Maulana Abul Kalam Azad on his birth anniversary on 11 November 2014 by celebrating it as National Education Day. The Chief Guest on this occasion was Professor Pramod Kumar Verma, Director General, Madhya Pradesh Council of Science and Technology, Bhopal. Students of RIE presented life sketch of Maulana Abul Kalam Azad and heads of the departments shared their views on contribution of Maulana Abul Kalam Azad as a freedom fighter, scholar and education minister of India.

### ***30th NCERT Staff Tournament***

The 30th Staff Tournament NCERT-2014 was held at RIE, Bhopal from 26 to 30 December 2014 at RIE, Bhopal. Shri Shiv Singh, Chief-Coach (Boxing) from Sports Authority of India (SAI), inaugurated the event. All the six contingents, namely, NIE, New Delhi, RIE, Bhubaneswar, RIE, Ajmer, RIE, Mysore, PSSCIVE, Bhopal and RIE, Bhopal participated in the tournament. Besides many games, three sports, namely, lemon-spoon race, floor hockey and tennis ball throw were organised for differently-abled staff members. The overall Championship (both men and women) went to RIE, Bhubaneswar, runner up — men to RIE, Bhopal and women to PSSCIVE, Bhopal. The valedictory ceremony was held on 30 December 2014. The Chief Guest of the valedictory function was Shri G. Chouragade, General Manager, BHEL, Bhopal and Shri R.K. Bajpai, BHEL, Bhopal was the Guest of Honour. Awards, prizes and mementoes were distributed to winners and runners-up, officials of the tournament and conveners of the committees by the Chief Guest and Professor H.K. Senapaty, Principal, RIE Bhopal. Mr Mahendra Barua, RIE, Bhopal was awarded the Ratan Memorial Award for his outstanding performance in cricket.





30th NCERT Staff Tournament held at RIE, Bhopal

#### **Workshop on Advance Research Methods in Education and Data Analysis**

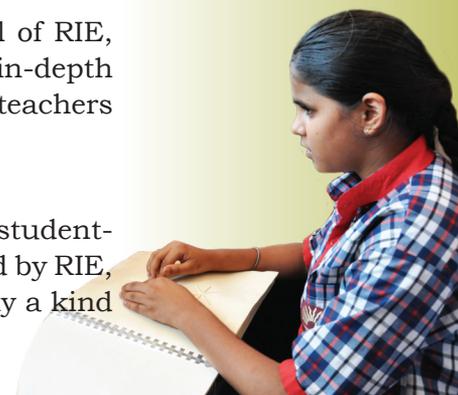
The programme was organised by RIE, Bhopal from 4 to 10 June 2014 for faculty members of the institute. The main objective of this programme was to develop skills and competencies of faculties in conducting and analysing educational research. Different methods and process of data analysis by using computer software especially SPSS was focused.

#### **Refresher Course on Effective Implementation of CCE and Professionalism**

The programme was conducted for the teachers of the D.M. School of RIE, Bhopal from 7 to 16 May 2014. The programme aims at proper and in-depth understanding of CCE and nurturing professional acumen in the teachers encompassing all 21st century skills.

#### **School Exposure Programme: Multi-Cultural Placement**

Multicultural placement is a school exposure programme where the student-teacher learns to function as a teacher. This programme was organised by RIE, Bhubneswar in Semester VI in the month of February. This is usually a kind



of pre-internship programme which is organised by RIEs for the duration of two-week with the following objectives:

- ❑ To expose pupil-teachers with different types of schools such as rural, urban and tribal;
- ❑ To understand the pupil-teachers about the school activities with different cultures;
- ❑ To enable the pupil-teachers to manage an arrangement class;
- ❑ To give experience of classroom activities to the pupil-teachers and
- ❑ To enable the pupil-teachers to conduct case studies.

The institute identified suitable number of cooperating urban schools, rural schools and tribal schools for the programme and students were placed by rotation in all the three types of schools.

Multicultural placement programme of B.Ed. (Second semester) student-teachers was held under three stages i.e., four-day pre-conference, two-weeks field placement and one-day post conference. Ninety-one student-teachers from arts and science stream were involved in the programme. A four-day pre-conference was held for the student-teachers, cooperating on different activities of the programme from 27 to 30 January 2015. The field placement of student-teachers was held from 2 February to 15 February 2015 at two clusters i.e., Remuna in Odisha and Govindpur, Dhanbad in Jharkhand. Student-teachers were exposed to different activities such as managing substitute classes, observation and reporting of school processes, delivering lessons, conducting case studies and writing report on teaching-learning materials. The post-multicultural placement session was conducted to collect feedback from trainees and supervisors for further improvement of the programme on 17 February 2015.

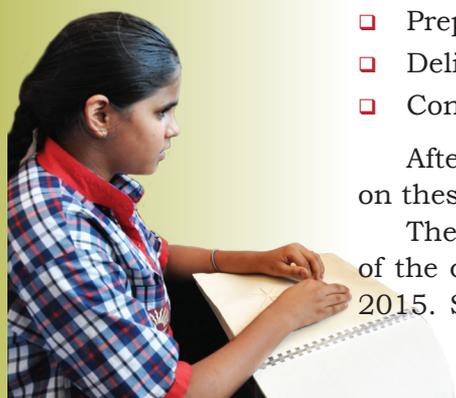
Regional Institute of Education, Bhubaneswar conducted multicultural placement programme as part of the course work of B.Sc. B.Ed. Part III (Semester-6) from 2 to 14 February 2015. One-day orientation programme was also conducted in the institute on 30 January 2015.

During this period 2-14 February 2015 (12 working days) each group had visited three types of schools and each school for four days. The following activities were conducted by each student in each school.

- ❑ Observation of lessons delivered by regular teachers
- ❑ Observation of day-to-day school activities
- ❑ Substitute teaching in actual school situation
- ❑ Preparation and use of learning materials/teaching aids
- ❑ Delivery of lessons
- ❑ Conducting case studies.

After the completion of the programme, students had submitted the reports on these activities which were evaluated by the faculty of RIE.

The institution conducted multicultural placement programme as part of the course work of B.A., B.Ed. Part-III (Sem 6) in the month of February 2015. Students were sent to urban schools like Kendriya Vidyalaya No. 1,



rural school like government school and tribal schools like Kalinga Institute of Social Science (KISS). They observed ten lessons, five in each method and observed contextual variations in activities of various schools.

### ***'Pehla Kadam' – A Step Towards Reforming Training Process***

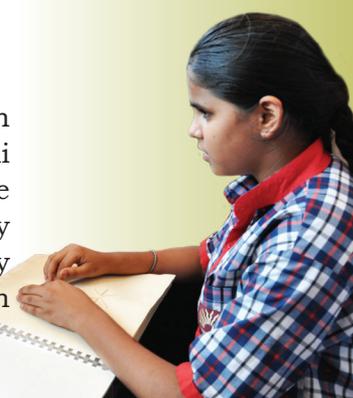
A pilot study was carried out with a group of 26 student volunteers from B.Ed., B.Sc. B.Ed. and B.A. B.Ed. in RIE, Bhubaneswar. The basic purpose was to find out the effectiveness of different process mechanisms at three phases: before, during and after the training process. These volunteers were trained on Saturdays, Sundays and holidays for six months from 10:00 AM to 1:00 PM. The training was conducted under the mentorship of the principal and basically they were oriented to become a creator rather than a follower. During the training programme, the emphasis was given on Study Skills and Note Taking, Action Planning, Active Listening, Self-awareness, Communication and Transaction Analysis, Understanding and Working on Subconscious and Reflecting on Experiences. They were also involved actively in the development of children's park, formulating a plan for the garden of medicinal plants, planning videos on teaching skills and expediting *Swachha Bharat Abhiyan* in the campus. They were divided in two subgroups and guided by some teachers to facilitate the activities. Reflection sheets and feedback schedules were maintained on each training session. It was found that the internalisation process, thinking-oriented instruction and process of experiencing leading to development of insight were effective. But the gap in practice restricted the long term effects. On the basis of this experiment, the mentor developed a model of training for further testing.



*Students and Staff participating in the 'Pehla Kadam' programme at RIE, Bhubaneswar*

### ***Swachha Bharat Abhiyan***

As per instructions of MHRD, the *Swachha Bharat Abhiyan* was initiated in NIE, CIET, PSSCIVE and RIEs on 2nd October 2014 on the day of Gandhi Jayanti. All the staff members and students paid tributes to the Father of the Nation, Mahatma Gandhi and took the pledge for devoting one hour weekly on cleaning. In RIE, Bhubaneswar, Saturday was chosen as the day of weekly cleaning drive and the practice has been going on regularly since then. On



the scheduled day, staff members and students clean the institute campus in the morning hours. The volunteer group involved in *Pehla Kadam*, as above, plays a significant role in the work. The *Swachha Bharat Abhiyan* has become a regular weekly feature of activities of all the constituents of the council.

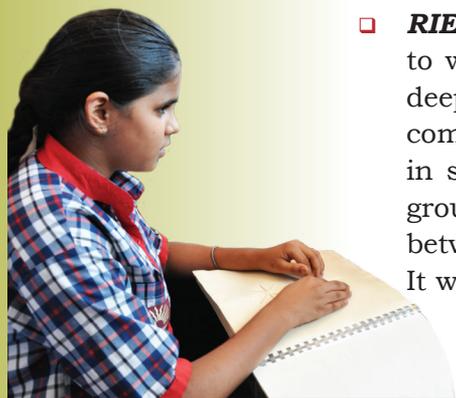
### **Working with Community**

□ **RIE Ajmer** : Training of pupil-teachers of B.Ed. (Secondary) Part I on Field Work with Community was organised at Chavandia and Tilonia villages from 18 to 24 February 2015. The specific objectives of the programme were to acquaint the pupil-teachers with the factors of working with community and the real life problems of the community in order to develop meaningful relationship between education and community. This also gave the students experiences of decentralised management system and skills related to the organisation of educational programmes within the community. In all, 27 pupil-teachers participated in the programme. Participatory approach was followed in the training programme. Pupil-teachers also organised cultural programmes to develop skills that can help to convey message to community on various problems related to socio-economic and educational aspects of the community.

□ **RIE Bhopal** : Working with the Community (WWC) 2015 was held at Budni, Sehore, M.P. from 16 to 20 March 2015 for the students of RIE, Bhopal. The objectives of the programme were: to familiarise the student-teachers with the different working conditions/environment of the schools of the village; to provide opportunities for exploring the different issues/problems prevalent in the village related to the school and the community; to provide opportunities to work with the community; to understand the community living; to create awareness among the community on different issues like, girl-child protection, girls' education, eradicating superstition, health, hygiene and nutrition, cleanliness, etc.; to participate in the community development programmes and to foster dignity of labour.

Two hundred thirty-one students (84 boys and 147 girls) of B.Sc. B.Ed., and B.A. B.Ed. IV semester and B.Ed. II year, actively participated in the programme. The daily routine included *Prabhat Pheri* followed by the physical exercise, yoga and meditation. The students visited the villages and engaged with the villagers in the cleanliness campaign. They carried out different surveys and case studies of *anganwadis*, school drop-outs, village infrastructure, economy of the village, etc. As part of the working with the community programme, students also presented a cultural programme.

□ **RIE Bhubaneswar** : The programme aims at enabling the teacher-trainees to work with a positive attitude and development of skills blended with deeper appreciation towards building a healthy society. The working with community programme of the institute was designed to involve students in social work activity that goes beyond individuals, families and small groups and to help students to gain an understanding of the connections between indirect social work practice and collective group interventions. It was intended to sharpen the students' awareness and understanding of

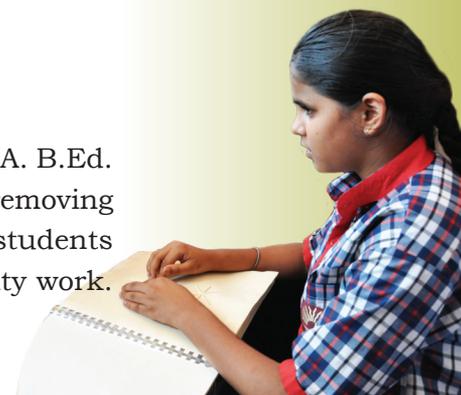


the inter-relationship between political, economic, and social forces and to encourage students to appreciate and value their identity as social workers. The programme was organised separately for B.Sc. B.Ed., B.A. B.Ed. and B. Ed. students and a brief report of each is given below. As per integral part of the four-year integrated course, a community work was organised from 16 March 2015 to 23 March 2015 for the students of B.Sc. B.Ed. Semester VIII. The main objectives of this work were to acquaint the student-teachers with the community, to appreciate the value of dignity of labour and to make them aware of the educational problems and needs of the society. Initially, the places to be cleaned in the campus were identified and responsibility was distributed to each group. Each group prepared posters, drawings and invitation cards for the awareness campaign. It was followed by a presentation on the topic 'Awareness on Sanitation and Hygiene'. Cultural programmes were also conducted. A mime act was presented by the members of group on the topic *Swachha Bharat*. On the last day of the community work, a cricket match was played between the community (including teachers and campus people) and the students. Feedbacks were given on the works done for community.



*Students and Staff participating in Swachata Abhiyan*

Community work was organised for the student-teachers of B.A. B.Ed. Various types of works like cleaning, cutting, chopping of bushes, removing of shrubs unwanted wild plants, etc., were conducted. Also, the students prepared posters and signboards related to the topic of community work.



All the students of B. Ed. II year were engaged in working with community programme as part of their curricular requirement of two-year B. Ed. course. The students were divided into different groups under the supervision of the faculty members of the institute and then the groups were engaged in different activities as per the time schedule and design of the programme for 8 days. The students under different groups carried out massive cleaning of the campus, hostels and local community areas. The students were divided into some small groups and enacted short value-based plays along with dance and music followed a community feast with the campus and local community members. The students conducted a social awareness campaign march along with the faculty members with self-developed posters, flag cards around the campus. At the end of the programme, the students submitted their individual report on different projects and activities on the basis of data collected through questionnaires and interview schedules.





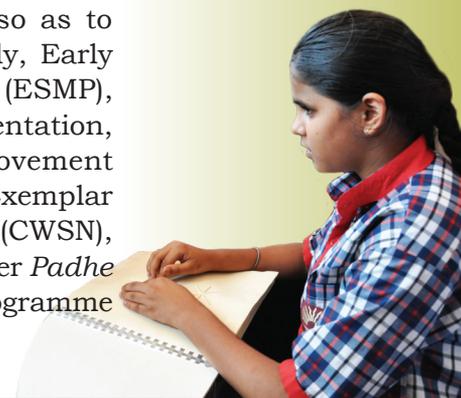
## 7. Major Schemes of MHRD Co-ordinated by NCERT

NCERT undertakes various research, development, training and extension programmes for quality improvement in school and teacher education. The apex academic committee of the Council which approves these programmes is the Programme Advisory Committee (PAC). Apart from these, the MHRD entrusts Council to implement its various schemes/ projects that are related to school and teacher education approved by Programme Approval Board (PAB) of MHRD. Different Constituents of NCERT are assigned the responsibilities to implement the scheme effectively. During the year 2014-15, the Council implemented the following schemes.

### ***Sarva Shiksha Abhiyan (SSA)***

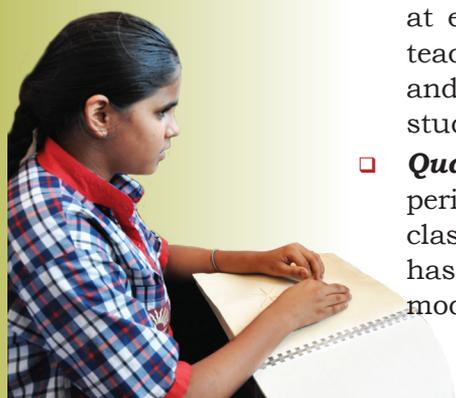
The SSA was launched by the Ministry of Human Resource Development (MHRD), Department of School Education and Literacy, Government of India for attainment of Universal Elementary Education. The objectives of SSA include satisfactory completion of eight years of quality schooling by all children. Currently, SSA is being implemented as a flagship programme for universal access and retention, binding gender and social category gaps in education and enhancement of learning levels of all children. SSA provides a variety of intervention aligned with legally mandated norms and standards and free entitlements as per the RTE Act, 2009.

Under SSA, states are supported academically and financially to implement the provision of quality elementary education to all children. NCERT provides academic support to States and UTs in their quality initiatives and capacity-building programmes as and when required. NCERT also participates in various committees of SSA functioning at the State/ UT levels to fulfil the commitment. NCERT has contributed to SSA by reviewing the project proposals submitted by States/UTs to the Project Approval Board (PAB), MHRD and providing comments on various dimensions including quality of elementary education. The Council has also undertaken major programmes so as to improve quality of school education at the elementary stage namely, Early Literacy Programme (ELP), Early School Mathematics Programme (ESMP), Continuous and Comprehensive Evaluation (CCE) and its implementation, Learning Indicators (LINDICS) class-wise and subject-wise, Improvement of Learning of Science and Mathematics at Upper Primary Stage, Exemplar Material for Curricular Adaptation for Children with Special Need (CWSN), Quality Monitoring Mechanism and National Achievement Survey. Under *Padhe Bharat Badhe Bharat*, *Sarva Shiksha Abhiyan (SSA)*, Early Literacy Programme



(ELP) and Early School Mathematic Programme (ESMP) initiated in 2014 are being carried out in all the states to improve fundamental skills of reading and writing and mathematics in early grades.

- ❑ **Early Literacy Programme** : It has been initiated by NCERT in 2007 for children in Grades I and II with the primary objective of helping to conceptualise reading and writing as meaningful and purposeful activities in the early years of life. The programme envisions enabling children to become motivated readers and writers with sustainable reading skills and empowering teachers with a sound understanding of reading and writing. The programme has actively disseminated and contributed to the discourse on reading for pleasure and meaning in the classrooms.
- ❑ **Early School Mathematic Programme** : It has been initiated in 2009 by NCERT in order to improve the teaching strategies and the learning outcomes in mathematics in early school grades i.e., Class I and II. The project aims at development of appropriate pedagogy and materials and conduct of researches to achieve its goals.
- ❑ **Continuous and Comprehensive Evaluation** : NCERT has developed an exemplar package on Continuous and Comprehensive Evaluation for the elementary stage in all curricular areas. CCE helps teachers to determine child's strengths, identify learning gaps and provide timely feedback and improve the teaching and learning process in accordance with the children's needs.
- ❑ **Learning Indicators** : NCERT has developed and published stage-wise curricular expectations and class-wise learning indicators for different subjects at the elementary stage. Learning indicators provide check points to assess child's learning at different points of time, so as to provide timely feedback to children for further improving each child's learning as per his/her pace.
- ❑ **Improvement of Learning Science and Mathematics at the Upper Primary Stage** : For improving the learning of science and mathematics at upper primary stage, a wide range of resource material for teachers and learners has been developed. Training programmes are being carried out for different States and UTs on connecting school-based knowledge to life outside the school and making learning of science and mathematics a joyful activity under *Rashtriya Avishkar Abhiyan* (RAA) launched by the Ministry of Human Resource Development, in 2015.
- ❑ **Exemplar Material for Curricular Adaptation for Children with Special Needs** : NCERT has prepared a handbook for the teachers teaching at elementary stage inclusive classrooms. The handbook provides the teachers with tips, suggestions, and strategies to help in their instructions and make classrooms inclusive for regular as well as the special needs students.
- ❑ **Quality Monitoring Mechanism** : With a view to establish a system of periodic monitoring and regular feedback on quality-related parameters and classroom processes in elementary schools throughout the nation, NCERT has developed a set of Quality Monitoring Tools (QMTs) which have been modified in the light of the RTE Act, 2009 and the revised SSA Framework.



The monitoring process involves assessing of progress, diagnosing strengths and weakness and taking remedial measures according to the need of the children, teachers and the school.

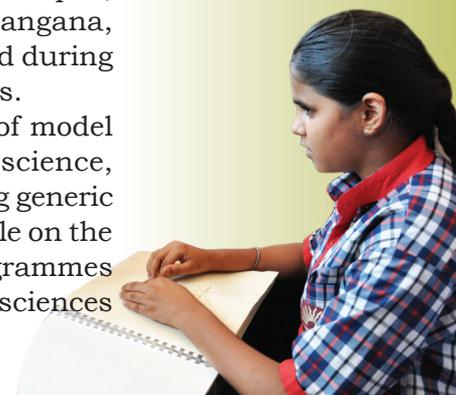
### ***Rashtriya Madhyamik Shiksha Abhiyaan (RMSA)***

The RMSA was launched in 2009 by MHRD with the goal of providing accessible, affordable and available quality secondary education to all students in the age group of 15-16 as a next step after achieving substantial retention under *Sarva Shiksha Abhiyan*. The RMSA framework is built around concerns of universal access to quality education at the secondary school stage. Universal access in RMSA has not been seen in physical terms only; this is envisaged in physical, social, cultural and economic terms– all interwoven in a common concept of inclusion. RMSA framework observes NCERT’s crucial role in providing quality secondary education as a resource organisation. It is under this backdrop, the NCERT has been making considerable efforts towards providing quality education (embedded with equity concerns) at all the school stages, in a holistic manner, viz., developing variety of curricular material for students, teachers, teacher-educators and other stakeholders, imparting teacher education both at pre-service and in-service levels, providing guidelines for assessment and examination, building capacity of various stakeholders for quality initiatives, conducting researches, etc.

In NCERT, the RMSA Project Cell was established on 26 April 2012 to address all the aspects of RMSA viz., setting up 6000 model schools, upgrading existing upper primary schools into secondary schools, strengthening the existing secondary schools, enhancing the quality of teachers, upgradation of KGBV, IEDC, vocational education, and also addressing the curriculum issues. The Cell advises the Government of India on policies and programmes pertaining to secondary education, both in formal and non-formal sectors. It undertakes various activities and programmes within the framework for implementation of RMSA with a focus on research, curricular material development, training and evaluation. As a Nodal Cell in NCERT for the implementation of RMSA, it also focuses on quality intervention and monitoring dimensions at the secondary stage of schooling.

In a major way, the Cell tries to meet one of the greatest challenges to reduce the gap between the intended, enacted and the received curriculum by strengthening curricular, pedagogical and evaluation aspects in the secondary education. Keeping in view of the quality and equity concerns, the Cell has undertaken a research study on ‘Analysis of Curricular Material and Capacity Building of State Curriculum Developers’ by covering the states of Maharashtra, Kerala, Karnataka, Uttar Pradesh, Nagaland, Chhattisgarh, Gujarat, Manipur, Mizoram, Meghalaya, West Bengal, Tripura, Andhra Pradesh, Telangana, Punjab, Madhya Pradesh and Odisha. The reports of the states covered during 2012-13 and 2013-14 have been prepared and shared with the states.

Another significant work done by the Cell was the development of model In-service Teacher Professional Development (ITPD) Packages in science, mathematics, social sciences, languages and arts education integrating generic concerns and CCE for the secondary stage. These packages are available on the NCERT website [www.ncert.nic.in](http://www.ncert.nic.in). A number of capacity-building programmes for the state key resource persons in science, mathematics and social sciences



were conducted by using ITPD Packages to improve classroom processes and students' learning in science, mathematics and social sciences. KRPs were provided with hands-on experiences and opportunities to reflect on various issues such as pedagogies for diverse group of students, gender parity, inclusive education, adolescence education, etc. Feedback received from the KRPs emphasises on the continuity of these programmes with longer duration.

Keeping in view the issues related to low enrolment ratio of girls and students with disabilities, equity concerns and vocationalisation of education at secondary stage as per the mandate of National Skill Qualification Framework (NSQF), a number of capacity-building programmes were also organised for the state functionaries and KRPs on gender issues, inclusion and vocational education.

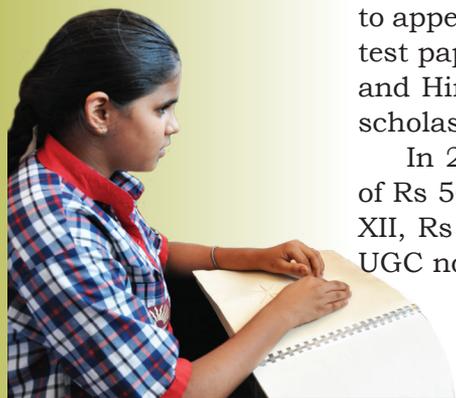
### **National Talent Search Scheme (NTSS)**

The National Talent Search Scheme has been going on since 1963 with the purpose to identify and nurture talented students every year so that they can serve the nation with distinction. Every year one thousand students are identified as talented students and are awarded the NTS Scholarship. After identifying the talent, they are also nurtured through interactions, visits to labs and exposure to latest developments. The Council also conducts nurturance programmes in collaboration with institutes like IITs, IISERs, NITs, TISS and IISc to enable the awardees to interact with accomplished persons and to motivate them for achieving excellence in their chosen fields.

The objectives of the National Talent Search scheme are: to enable the awardees to develop their intellectual potentialities in the best possible way; to motivate the curiosity of awardees so as to stimulate their powers of creativity and research spirit; to enable the awardees to exchange views with their peers of similar calibre and to promote a greater understanding and appreciation of each other's academic views; to enable the awardees to develop new concepts in the field of their specialisation; to encourage the awardees to concentrate their academic interest for future pursuits; to enable awardees to develop understanding of recent development in the subject area of their interest; and to promote innovation, experimentation and research in the area of their interest.

The scholarships under the present scheme are awarded to the candidates for pursuing courses in science and social science up to the doctoral level and in professional courses like medicine and engineering up to second-degree level. The present scheme comprises of identification of talent through two stage selection process. While States/UTs conducts the first stage, the second stage at national level is carried out by NCERT. As per the current scheme, all students studying in Class X in any type of recognised school are eligible to appear from the state where his/her school is located. At the national level, test papers are developed in 12 modern Indian languages apart from English and Hindi. NTS examination includes language test, mental ability test and scholastic test.

In 2014-15, the rates of scholarships were increased from existing rates of Rs 500/- per month to the rates of Rs 1250/- per month for Class XI and XII, Rs 2000/- per month for UG and PG and for Ph.D. in accordance with UGC norms.



### ***Environmental Orientation to School Education (EOSE)***

The scheme was initiated by MHRD in 1988. In the light of the *National Policy on Education-1986* (revised in 1992) which stated that protection of the environment being a value must form an integral part of curriculum at all stages of education. Generally, one set of syllabi and textbooks are used in a State whereas the environmental conditions and environmental concerns vary from one region of the State to the other. It was, therefore, decided to take up a centrally sponsored scheme of Environmental Orientation to School Education which will allow educational programmes in the schools to be fully harmonised with the local environmental situation and concerns.

The EOSE Scheme has now been handed over to NCERT by the MHRD. All constituents of the Council such as various departments of NIE, RIEs, CIET and PSSCIVE contribute in the implementation of the scheme. A team consisting of a coordinator and nodal members representing different departments and constituents has also been constituted. A meeting of the team was held to chalk out the programmes to be conducted under EOSE at NIE, New Delhi on 2-3 March 2015. It has been decided to undertake the following activities under the scheme:

#### **1. Awareness**

- ❑ Holding skit/song/drawing/quiz competitions
- ❑ Drawing/poster/quiz/essay/poem competition as a regular feature in JNNSMEE
- ❑ Observation of environmentally important days
- ❑ Developing all constituents of NCERT into models of environmentally sustainable campuses

#### **2. Capacity Building**

- ❑ Programmes for in-service school teachers
- ❑ Programmes for teacher-educators such as DIETs
- ❑ Programmes for NCERT faculty

#### **3. Research**

- ❑ Data on the status of environmental education under different aspects such as status of implementation, infusion, barriers in implementation, etc.
- ❑ Review of environment-related materials
- ❑ Evaluation of teaching-learning process including pre-service courses
- ❑ Good practices in schools
- ❑ Alienation factors especially in disturbed areas

#### **4. Development**

- ❑ Training modules
- ❑ Enrichment materials (print and electronic)
- ❑ Region-specific material
- ❑ Initiate publication of a journal on environmental education



## 5. **Enrichment**

- ❑ International conference
- ❑ National conference
- ❑ Collection of books, journals, CDs, DVDs, region-specific literature, songs, etc.

## 6. **Networking and Collaboration**

- ❑ Networking between different constituents of NCERT such as NIE, RIEs, CIET and PSSCIVE, Bhopal
- ❑ Collaborative projects with other organisations in India and abroad
- ❑ Sharing of resources and expertise with other organisations.

### **National Skills Qualification Framework (NSQF)**

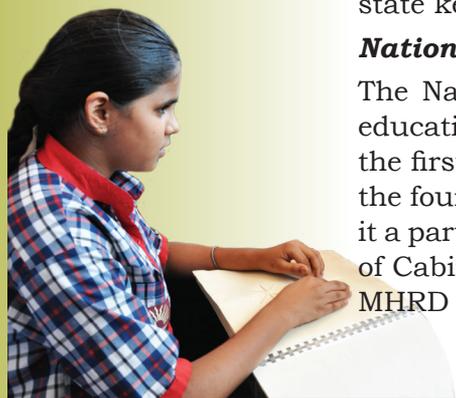
In pursuance of National Policy on Skill Development (2009) and also to achieve the target to train 500 million people of the country by 2022 under the Skill Development Mission, the Govt. of India launched NSQF. It is an integration of education and competency-based skill framework at various levels. The framework spells out qualifications at different levels with respect to knowledge, skills and attitude. The framework offers horizontal and vertical pathways linking higher education. The architecture of the NSQF comprises of ten levels leading to Ph.D. degree. The NSQF levels 1 to 4 are to be offered in school education.

The MHRD announced the launch of NSQF in school education to integrate skill development component (vocational education) under CSS in vocationalisation of secondary and higher secondary education in the year 2012 (as NVEQF which later subsumed as NSQF in 2013). The NSQF is operationalised in public-private partnership mode with active participation of industries in skill development programme under National Skills Development Corporation (NSDC). The pilot project was undertaken by Haryana in 2012 in 40 government schools for levels 1- 4 from Classes IX to XII offering courses in four sectors of economy viz., IT and ITeS, Retail, Security and Automobile. Presently, the NSQF has been launched in about 22 states in various other sectors viz., Agriculture and Horticulture, Beauty and Wellness, Electronics, Healthcare, Hospitality, Telecommunications, Travel and Tourism, etc.

The MHRD has mandated NCERT for the development of curricula and courseware of NSQF courses from L1 to L4 for Classes IX to XII. It is mandatory for all states to follow the curriculum developed by the PSSCIVE, Bhopal. The institute is also responsible for training of teachers and capacity-building of state key functionaries for effective implementation of NSQF.

### **National Population Education Project (NPEP)**

The National Population Education Project (NPEP) was launched in school education system of India in April 1980. It was implemented in four phases: the first phase (1980-85), the second (1986-1992), the third (1993-1997) and the fourth (1998-2002). Govt. of India took over the project in 2002 and made it a part of Quality Improvement in Schools (QIS). In pursuance of the decision of Cabinet Committee on Economic Affairs (CCEA), Government of India, the MHRD transferred four components of the scheme on Quality Improvement



in Schools (QIS) to NCERT with effect from April 2006. The NPEP is one of the components of QIS being implemented by NCERT. Adolescence Education Programme (AEP) funded by UNFPA is also component of NPEP. At present, 33 States/UTs are implementing this project. The objectives of the project are:

- ❑ to institutionalise population education in the school education system;
- ❑ to develop awareness and positive attitude towards population and development issues leading to responsible behaviour among students and teachers and, indirectly among parents and the community at large; and
- ❑ impart authentic knowledge to learners about Adolescent Reproductive and Sexual Health (ARSH) concerns, inculcate positive attitude and develop appropriate skills, for responsible ARSH behaviour.

Population education framework focuses on six major themes viz., Population and Sustainable Development, Gender Equality and Empowerment of Women, Adolescence Education, Family: Socio-economic Factors and Quality of Life, Health, Nutrition and Education: Key Determinants of Population Change and Population Distribution: Urbanisation and Migration.

The following are the major thrust areas of Population Education:

- ❑ Integration of new population and development concerns: gender equality and equity; family: its changing structures and roles; sustainable development; migration and urbanisation;
- ❑ Integration of ARSH concerns conceptualised as adolescence education encapsulating process of growing up, nutritional needs of adolescents, HIV/AIDS and drug abuse in the content and process of school education and teacher education; and
- ❑ Life skill development in adolescence education among learners.

Concerted efforts are made by the Council to integrate population education and adolescence education in the school syllabi, textbooks, other instructional materials, pre-service teacher education courses, in-service teacher training programmes and evaluation process, both at national and state levels. Different curricular activities that focus on crucial population education themes and adolescence education concerns are organised in schools as well as communities. Special efforts are also made to ensure media coverage of these activities to elongate their impact.

Under the scheme Training and Resource Material: Adolescence Education (2012), Source Book: Population Education (2009, 2011 and 2014), Advocacy Material in Adolescence Education and News Bulletin of Population Education, Population Education: A National Source Book (1990), Adolescence Education in Schools: A Package of Basic Materials (1990) have been developed. A number of training programmes have also been conducted under population education for the teachers and other educational functionaries from KVS, NVS and State/UTs. In order to develop various life skills among children, various activities such as painting, elocution, debate, essay and quiz competitions, long distance run at the district/sub-divisional/block headquarters, special interactive lectures and national role play and folk dance competitions are organised. These programmes were conducted while observing World Population/AIDS/Environment/Women's Day and other International/National Days/Events. Based on the experiences of some States, Population Education activities have



been made an integral part of Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children.

### **Adolescence Education Programme (AEP)**

The Adolescence Education Programme (AEP) was launched by MHRD, in 2005. A major part of AEP is supported by United Nations Population Fund (UNFPA), and implemented by national agencies viz., Kendriya Vidyalaya Sangathan (KVS), Navodaya Vidyalaya Samiti (NVS), National Institute of Open Schooling (NIOS) with NCERT as the coordinating agency. AEP focus on the needs and concerns that are faced by children's during adolescence and empower them to acquire knowledge of their needs and concerns related to the period of adolescence and develop life skills that will enable them to practice informed and responsible behaviour. The programme aims at facilitating the process of comprehensive integration of these needs and concerns in the school education curriculum and teacher education system.

Adolescence Education Programme is focused on three major concerns:

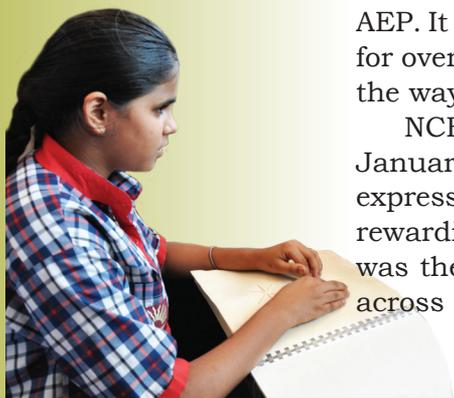
- ❑ Process of growing up during adolescence,
- ❑ Prevention of Substance (Drug) Abuse, and
- ❑ Prevention of HIV and AIDS.

The Adolescence Education Programme (2005) aims to reinforce/support the development of behaviours that will empower adolescents to make healthy choices and provide opportunities for enhancement of life skills and reinforcement of positive behaviours to enable young people to grow up healthy, cope with challenges and optimise opportunities in positive and responsible ways. The mandate of the Adolescence Education Programme is to cover all secondary and senior secondary schools, rural, urban and transitional across the country.

Under AEP, various activities like material development, advocacy for educational administrators, principals of schools, parents and community leaders, training of teachers, integration of adolescence education elements in the school syllabi and textbooks and organisation of life skill-based curricular activities in all the schools are being organised. A material for teachers on basic counselling skills in the context of the Adolescence Education has been developed and has been translated to Hindi also.

NCERT and UNFPA jointly organised an advocacy-cum-sensitisation programme for senior level officials and education administrators of Kendriya Vidyalaya Sangathan and Navodaya Vidyalaya Samiti to review the status of the programme, to recognise and celebrate the achievements in the programme and to develop a common understanding of the strengths and challenges in AEP. It was also a platform to leverage the strengths and recommend strategies for overcoming the challenges in institutionalising AEP and finally to envision the way forward for institutionalising AEP.

NCERT organised National Youth Festival (NYF) as part of AEP on 28-30 January, 2015 with an objective to provide a platform to young people to express their thoughts and ideas on education that is meaningful, relevant and rewarding from their perspective on theme 'The school of my dreams'. The NYF was the culmination of creative writing and poster making events organised across all the 1095 Kendriya Vidyalayas, 595 Jawahar Navodaya Vidyalayas



and 20 regional centres of the National Institute of Open Schooling. These were on-the-spot events for students of Classes 8 to 10 (ages 13-15) and open school learners enrolled at the secondary level.

NCERT launched Adolescence Resource Centre (ARC) website [www.aeparc.org](http://www.aeparc.org) that offers uninterrupted access to varied resources and virtual interaction opportunities on issues related to adolescent health and well-being for teachers, trainers, academicians, development practitioners, policy makers and the young people themselves.

### **Introduction of Yoga in Schools**

In pursuance of the decision of Cabinet Committee on Economic Affairs (CCEA), MHRD has transferred four components of the 'Scheme on Quality Improvement in Schools' to NCERT with effect from April 2006. 'Introduction of Yoga in Schools' is one of the components to be implemented by NCERT.

Yoga is an integral part of the subject 'Health and Physical Education' which is a compulsory subject up to the secondary school stage. The NCF-2005 adopted a holistic definition of health, in which yoga is an integral part. 'Introduction of Yoga in Schools' scheme provides financial assistance to yoga institutions for enrichment of libraries of institutions, providing training to teachers and conducting compulsorily residential one-month duration Yoga training to about 30 Yoga/physical education teachers in government and govt-aided schools. The teacher training programme on Yoga conducted under the scheme is based on the stipulations made in NCF-2005 and the syllabi of 'Health and Physical Education' prepared by NCERT.



## 8. Visitors to NCERT and Foreign Visits by NCERT Faculty

National Council of Educational Research and Training is a hub of educational experiences in the area of school and teacher education. Educationists, educational administrators, faculty members, researchers, teacher-educators, students, etc., from national and international institutions visit NCERT to gain experiences in the areas of curriculum development, preparation of syllabi, textbooks and teaching-learning materials, production of audio-video materials and educational kits, the model science laboratories, National Library of Educational and Psychological Tests, National Documentation Unit, NCERT Library, audio and print publication centres, Herbal Garden, Science Park, etc. The visitors get unique platform for exchanging informations, ideas and innovative thoughts when interacting with the faculty members of NCERT that in turn, helps to renovate the school and teacher education system.

The International Relations Division co-ordinates the visit of foreign delegates and the Public Relations Unit of NCERT coordinate the visit of persons from national organisations and institutions.

### ***Visits by Delegations/Experts from Various Countries***

- ❑ Mr Hongkon Kim, Counsellor, Embassy of the Republic of Korea visited NCERT on different occasions in April, June and August, 2014. The purpose of the visit was to strengthen the relationship between two countries in the area of school and teacher education. During his visit in August, he discussed about the education in Korea, particularly vocational education and training. During his interaction with Director, NCERT and Head, IRD in October, 2014 he placed a proposal of visit by Indian delegation to Korea mentioning that all the official expenses of the delegation will be borne by the Korean side. These efforts culminated into a visit of a two member delegation from NCERT to Korea in December 2014.
- ❑ A delegation consisting of 29 members from Taiwan, Vietnam and Saudi Arabia (led by British Council) visited NCERT on 2 December 2014. The objective of the visit was to understand the school education system in the country and also the current scenario of ICT in school education. Faculty from different departments of NCERT interacted with the delegation. The delegation was briefed about the role and functions of NCERT. A detailed presentation on various activities of NCERT was also made. During interaction, the delegates from visiting countries raised various queries related to curriculum development process and use of ICT in teacher professional development which was responded by the faculty members.



The delegation from Taiwan also shared their country's experiences in school education sector and responded to various questions of NCERT faculty on the issue of health and physical education, inclusive education and use of ICT in teaching-learning process.



*Delegation from Taiwan, Vietnam and Saudi Arabia interacting with faculty of NCERT*

- ❑ A delegation of 29 participants from 15 countries doing International Diploma Course in Educational Planning and Administration being conducted by NUEPA, New Delhi visited NCERT on 5 March 2015. The participants were from Bangladesh, Cambodia, Ethiopia, Fiji, Ghana, Mauritius, Mongolia, Myanmar, Niger, Nigeria, Sri Lanka, Tanzania, Tunisia, Yemen and Zambia. The objective of the visit was to understand the structure and functions of NCERT and learn about the innovative programmes of the Council. They were briefed about the role and functions, structure, major achievements and recent challenges before NCERT. The delegation raised various queries related to philosophy of Indian education, curriculum development process at Central and State levels, use of ICT in teacher professional development, Curriculum Framework for Teacher Education, Children with Special Needs, etc.



*Participants of the International Diploma Course in Educational Planning and Administration conducted by NUEPA interacting with Prof. Saroj Bala Yadav, Dean Academic, Prof. Rajaram Sharma, Joint Director, CIET and faculty of NCERT*

### **Visitors from Indian Institutions/Organisations to NCERT**

Nine hundred and forty-seven visitors from various universities, colleges, schools, Defence Service Officers, institutions, non-government organisations and others from all over India visited NCERT during the year. They visited



different NIE departments, library, Science and Herbal Parks, Publication Division and CIET to know about the functioning and activities being taken up in NCERT. They were oriented about CIET's functions, concept of ICT in education, NROER, ICT Curriculum and also provided hands-on experience in studios, transmission area, EDUSAT network, editing consoles, etc.

### **Foreign Visits by NCERT Faculty**

Ideas and experiences in school and teacher education are shared and gained by the faculty during their visit to various countries. NCERT faculty visited Dubai, Mauritius, Thailand, Germany, Vietnam and United States of America wherein they reviewed and moderated the examination papers, made presentations and interacted with other experts.

Professor B.K. Tripathi, Joint Director, NCERT, visited the United States of America from 12-16 May 2014. He attended the 17th Annual ISEF Educator Academy in Los Angeles CA, USA. The Intel International Science and Engineering Fair (ISEF), a programme of Society for Science and the Public, is the world's largest pre-college science fair competition. ISEF-2015 was attended by the students from 73 countries who showcased research-based exhibits and innovations. Science competitions are catalysts for improved education in classrooms and a way to promote, identify and develop innovation talent. Research shows a direct connection between participation in student research and ongoing success in science, including successful completion of a Master's or Ph.D. There were 11 selected students from India who presented their talent during this fair. During the five-day programme, the participants were benefitted by plenary lectures of eminent scientists, technocrats and



*Prof B.K. Tripathi, Joint Director, NCERT along with Sir Harry Kroto, Nobel Laureate in Chemistry during his visit to USA for the 17th Annual ISEF Educator Academy Fair 2015*



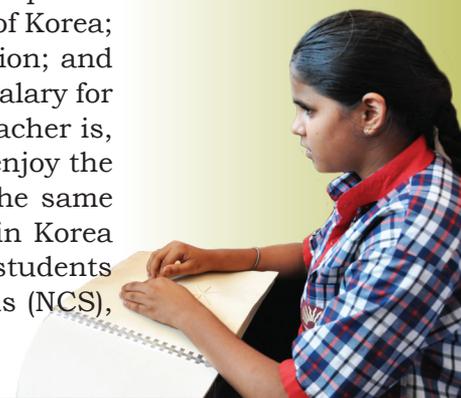
*Students explaining their projects during the 17th Annual ISEF Educator Academy Fair 2015*

innovators, including a noble laureate in Chemistry. The fair also had thematic presentations on various concerns pertaining to school education. Professor B.K. Tripathi made a comprehensive presentation of the visit at NCERT to brief out the details of the fair and how such fairs can help in strengthening and promoting science in school education.

Professor H.K. Senapaty, Principal, RIE, Bhopal visited Thailand from 10-12 November 2014. He participated in the UNESCO Resource Distribution Training Centre (RTDC) regional seminar 2014 held at Chiang Mai University, Thailand, UNESCO Bangkok. The theme of the seminar was 'Promoting Reflective Practices in ICT Pedagogy Integration'. The aim of the seminar was to provide the members a platform to actively exchange different views, strategies and individual experiences in reflective teaching. The seminar helped in strengthening the capacity of RTDC members in cultivating a culture of reflective practices, promote life-long learning and eventually serve as a frontier in advocating the reflective teaching practices for the effective ICT-Pedagogy integration. This was a very enriching international experience in professional development.

Professor Rajaram Sharma, Joint Director, CIET visited Malaysia from 24-27 June 2014. He represented NCERT at the Second Open Educational Resources Symposium organised jointly by the Commonwealth of Learning, Vancouver, Canada and the Wawasan Open University, Penang, Malaysia. Delegates from various countries across Asia attended the Symposium. Professor Rajaram Sharma submitted a paper on National Repository of Open Educational Resources (NROER), an Indian OER initiative. In connection with the case study of Karnataka Open Educational Resource initiative, he attended a 4-day preliminary workshop at the WOU at Penang, Malaysia from 3-6 October 2014. The structure and details of the proposed case study was discussed in the workshop.

Professor Poonam Agrawal, Head, IRD and Professor Amarendra Prasad Behera, Head, DICT, CIET visited Republic of Korea from 14 to 20 December 2014. The visit of the delegation was organised with the objective to study education system in Korea particularly school education and strengthen bilateral cooperation. The delegation visited EBS School Programme Service which offers educational content, e-learning content, and self-learning content for all age groups complementing school education as well as life-long education through TV, radio, satellite, websites, cable TV, internet, mobile, CDs, etc. The school programme and e-learning service can be of much interest to India. The Indian delegation also got a chance to join a larger delegation invited by MOFA, Korea consisting of delegates from Bulgaria, Chile, Colombia, Czech, Finland, Ghana and Vietnam. The two presentations from the Korean Educational Development Institute (KEDI) focused on Educational and Economic Development of Korea; Development of Korean Education; Korean Educational Administration; and Education for the Future. The teacher policy of Korea includes high salary for teachers and teacher performance rewarding system. Becoming a teacher is, however, a highly competitive and selective process as the teachers enjoy the status of civil servants and the private school teachers also have the same stability as the government teachers. The education for the future in Korea looks forward to enhancing efforts towards increasing the support for students with special needs, establishment of National Competency Standards (NCS),

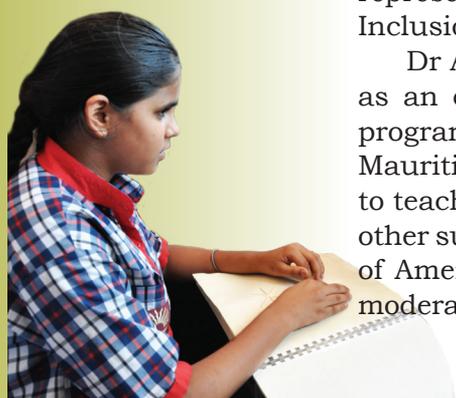


strengthen vocational education to raise high skilled talent, expanding support for local universities, and establishment of national life-long learning system. It was interesting to note that government pays the salary of teachers of private schools too. The kinds of schools include general, vocational, science, special high schools. The drop-out rate is practically nil with 99 per cent of students from elementary schools enrolling in the middle school and 99.7 per cent from middle school enrolling in the high school. The transition from school to college/universities is 70 per cent. Nevertheless over supply of higher education is resulting in increased rate of youth unemployment and thus youth 'Not in Education, Employment or Training' (NEET) is a challenge to Korean society. As a result, a drive 'Work First, College Later' has been initiated.

The delegation also visited Korea Research Institute for Vocational Education and Training (KRIVET). KRIVET's tasks as specified by Korea Skills Development Law, 1997 include among others, R&D on national and private qualification systems/National Competency Standards (NCS) curriculum. The emphasis now is to create workforce to support creative economy with creativity, humanity, sensitivity and character. Vocational education reforms are being manifested through innovative vocational high school policies i.e., Meister High Schools. The Meister High School graduates have strong career maturity and readiness with the employment rate of 91 per cent. There is a strong financial support from the Government. Effort is there to select excellent students through incentives. This system is expected to convert the current society which focuses on academic degrees into a society which focuses on performance. The preference of students and their parents to Meister High Schools has increased over the years. For international cooperation, KRIVET has signed MoU with 29 organisations as of 2014. Looking into the role of TVET in national development, the government is planning to develop National Qualification Framework (NQF) based on National Competency Standards. Thus, studying new reforms on TVET in Korea can be interesting and useful for India also while reforms in India may interest the Korean Government.

Professor Anita Julka, DEGSN visited Dubai from 9-10 December 2015. She participated as an Indian delegate in the policy dialogue, 'Special Educational Needs: Access and Engagement'. This conference was organised by the British Council at Zayed University, Dubai on 9 to 10 December 2015. This conference brought together policy-makers and senior practitioners from around the globe to share best practice and discuss the challenges and opportunities that present themselves in terms of ensuring access and engagement for all. Experts from England, Scotland, Hong Kong, Lebanon, Malaysia, India, Brunei, UAE, Jamaica and others presented keynote lectures in the workshops. As a representative of India, she made a presentation on the topic: A Window on Inclusion: the Experience in India.

Dr Anup Kumar Rajput, DEE visited Mauritius from 12-16 January 2015 as an external international examiner to B.Ed. part time maths honours programme of University of Mauritius. The programme was hosted by the Mauritius Institute of Education for in-service teachers to make them eligible to teach mathematics in higher secondary classes. The external examiners in other subject areas were from Finland, South Africa, England and United States of America. During the visit as an international examiner, he reviewed and moderated the examination papers for six maths honours courses, reviewed the



examination scripts and finalised the marks for each candidate in all courses, reviewed dissertation/projects submitted by the candidates as a requisite to the award of the degree and conducted the viva-voce examination. He also attended the board of examiners meeting to finalise the result and to advise the university on course structure, syllabus and duration of the programme.

Professor Pawan Sudhir, Head, DEAA visited Germany on 16-17 September 2014 to participate in the workshop on 'International Perspectives of Research in Arts Education' against the call of Federal Ministry of Education and Research, Germany. A research proposal 'The Impact of Art Integrated Curriculum on the Learning and Development of Children from Diverse Cultural Backgrounds in Schools of Delhi' was submitted, and the same was reviewed by international and interdisciplinary board members for its inclusion in the workshop following which participation of the researcher was funded by the Federal Ministry of Education and Research for the second workshop on International Perspectives of Research in Arts Education. The research proposal was designed based on the experience gained from the 'Art Integrated Learning' programme conducted by the Department of Education in Arts and Aesthetics (DEAA) in 20 MCD schools of Delhi in 2011-2014. The research proposal was appreciated by the International Research Forum for its importance on International Perspectives of Research in Arts Education. She was also invited to participate as member of the review team in the closing meeting of the UNESCO initiative in Asia Pacific region on 'Promotion of the Tangible Cultural Heritage for Educators to Reinforce Education for Sustainable Development', on 24-25 March 2015, in Hanoi, Vietnam. The event was to mark completion of the first phase of UNESCO project on Promotion of the Tangible Cultural Heritage in Asia Pacific. All the four countries: Pakistan, Palau, Uzbekistan and Vietnam (where the project was on) presented their reports on Tangible Cultural Heritage and its impact. Dr Sudhir had the opportunity to visit two project schools of Hanoi to have the first hand experience of education of and through tangible cultural heritage.

Professor Sandhya Singh, DEL visited Mauritius from 13 to 23 July 2014. She acted as a resource person in the multi-disciplinary workshop on Emerging Trends in Education: Technology, Research and Curriculum organised by the Language Resource Centre, Mahatma Gandhi Institute and Ravindranath Tagore Institute, Moka, Mauritius. She delivered lectures on Emerging issues and Curriculum Development, New Pedagogies in Language Education, CCE Practices in Language Education, Teaching Language and Literature etc.





## APPENDICES

- ❑ **Appendix I**  
Publications/Presentations by NCERT Faculty
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- ❑ **Appendix VI**  
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- ❑ **Appendix IX**  
NCERT Constituents and Faculty



## Publications/Presentations by NCERT Faculty

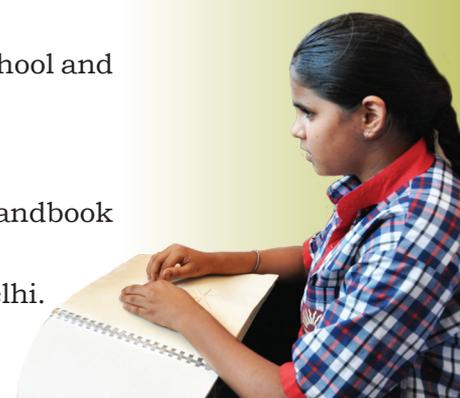
### DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

#### Research Papers/ Articles

- Nikalje M.,Varada. 2014. Book Review 'What is RTE?', *The Primary Teacher*. XXXIX (3), 105-6.
- Sharma, Kavita. 2014. CCE: A support or a challenge to RTE. *Readings in Education*, 5, 71-77.
- Sharma, Kavita. 2014. Paryavaran adyayan aur ekikrit approach, *The Prathmik Shikshak*, 38(2), 5-8.
- Sharma, Kavita. 2014. Pathyapustkon se pare seekhna seekhana, *Prathmik Shikshak*, 38(3) 7-12.
- Sharma, Usha. 2014. School ka samajshastra. *Prathmik Shikshak*, 37 (3), 19-24.
- Soni, Romila. 2014. Ask the expert. *NAVTIKA*, V (3), 68-70.
- Soni, Romila. 2014. Teaching and learning with collections for the surrounding. *The Primary Teacher*, XXXIX (1 and 2), 69-75.
- Soni, Romila. 2015. Developmentally appropriate assessment. *NAVTIKA*. V (4), 60-67.
- Soni, Romila. 2014. Developing environmental awareness. *NAVTIKA*. V (2). 21-32.
- Yadav, Padma. 2014. A study of academic readiness of pre-school children. *The Primary Teacher*, XXXIX (1 and 2), 23-31.
- Yadav, Padma. 2014. Kuch anubhav padhne-padhane ke. *Prathmik Shikshak*, 38(3), 40-47.
- Yadav, Padma. 2014. Performance Indicators (PINDICS) for elementary school teachers – A means of self-appraisal. *The Primary Teacher*, vol XXXIX (3), 15-30.
- Yadav, Padma. 2014. Quality issues in Right to Education (RTE) Act, 2009. *Anusandhan Anveshika, A Bilingual International Research Journal*, (IV), 7-12.
- Yadav, Padma. 2014. Shishu uddipan kriyayen. *Prathmik Shikshak*, 38 (1), 42-50.
- Yadav, Padma. 2014. Teaching-learning of English language in pre-school and early primary grades. *The Primary Teacher*, XXXIX (4), 64-71.

#### Books

- Soni, Romila., and Sangai, Sandhya. 2014. Every child matters – A handbook on quality early childhood education. NCERT, New Delhi.
- Yadav, Padma. (Ed.). 2014. ECCE — A way forward. NCERT, New Delhi.



**Book Chapter**

Nikalje M, Varada. 2014. Subramanya Bharati. *Social thinkers of modern India: Contemporaries of Swami Vivekananda* (62-64). NCERT, New Delhi.

**Paper Presentations**

Nikalje M. Varada. 2014. The portrayal of women in the Panchtantra: An analysis. Presented a paper in the national seminar on Gender and Violence: A Challenge for Equitable Society', Jamia Millia Islamia, New Delhi, 15-16 October.

Nikalje M. Varada. 2014. Selection of children's literature: A commitment to challenging discrimination. Presented a paper in the national conference on Language and Inclusive Education, Department of Education in Languages, NCERT, March 2014.

Sharma, Kavita. 2015. Bridging gaps in the intended and transacted curriculum in EVS at the primary level. Presented a paper in the regional meet on Science Education, RIE, Bhopal, 28 February.

Sharma, Usha. 2015. Barkha kramik pustakmala mein gender sambandhi samvedansheelata. Presented a paper in the national seminar on Language and Inclusive Education, Department of Education in Languages, NCERT, New Delhi, 10-12 March.

Sharma, Usha. 2014. Shikshak-shiksha aur prarambhik saksharta ki shiksha—shastriya samajh. Presented a paper in the national seminar on Teacher Education in India—Aligning with Contemporary Need and Trends, Shyama Prasad Mukherjee College, New Delhi, 12-13 February.

Yadav, Padma. 2014. Role of Early Childhood Care and Education (ECCE) in improving learning outcomes. Presented a paper in national seminar on School Level: Issues in Policy Planning and Implementation, NERIE, Umiam, 15-16 October.

Yadav, Padma. 2014. Role of Early Childhood Care and Education (ECCE) in developing number readiness. Presented a paper in the national meet on Mathematics Education. RIE, Bhopal, 21-23 December.

**DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)****Research Papers/Articles**

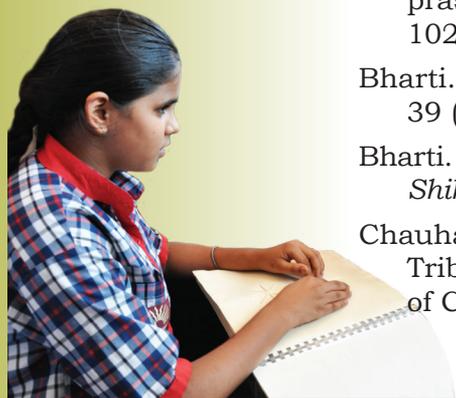
Bharti. 2014. Developing reading profile of students without using standardised tools – Is it possible? *Indian Educational Review*. 52 (1), 81-97.

Bharti. 2013. EDUSAT ki sahayata se samaveshi shiksha mein sewakalin prashikshan karyakram –Ek reportaaz. *Bhartiya Adhunik Shiksha*, 33 (3), 102-109.

Bharti. 2014. Collaborations in inclusive education. *The Primary Teacher*, 39 (3), 70-78.

Bharti. 2014. Samaveshi shiksha ke liye vyavasayon ka vikas. *Bhartiya Adhunik Shiksha*, 34 (4), 22-35.

Chauhan, S.C. and Singh, V.K. 2014. Education of children from Scheduled Tribes in Naxal affected areas: A qualitative study in Dantewada District of Chhattisgarh. *DIE FOERA*, 8 (1), 42-49.



**Books**

- Julka, Anita. 2014. *Including children with special needs: Primary stage*. NCERT, New Delhi.
- Julka, Anita., and Bharti. 2014. *Teachers creating inclusive classrooms: Issues and Challenges– A research study*. NCERT, New Delhi.
- Kaushik, Bharti. 2014. *Shikshan aur adhigam ki srajanmak padhtiyaan*. (Hindi translation of teaching-learning strategies in constructivism). NCERT, New Delhi.
- Kaushik, Bharti. 2015. Inclusive education in India: Present scenario and road ahead in Ansari, Iftekhar Ahmed (Ed.), *Developing society: Emerging challenges* (157-176). Ankit Publications, Delhi.

**Paper Presentations**

- Julka, A. 2014. Inclusive education in India. Paper presented in the International Conference on *Access and Engagement of Children with Special Needs*, British Council and Zayed University, Dubai, 10 December.
- Julka, A. 2015. Keynote address in an international conference on *Building Inclusive Schools and Classrooms* National Convention of Educators of the Deaf (NCED), Bhubaneswar, Odisha, India, 7 January.
- Julka, A. 2015. Keynote address in a national convention on *Mental Health Programmes in Schools-Convergence of Special Education and School Counselling Services*. Association of Indian School Counsellors and Allied Professionals (AISCAP) and Expression India, 23 February.

**DEPARTMENT OF GENDER STUDIES (DGS)****Research Paper/Articles**

- Srivastava, Gouri. 2014. Guidelines for making textual materials gender inclusive. *University News, A weekly Journal of Higher Education*, 52 (25), 23-29.

**Books**

- Srivastava, Gouri. 2014. Cornelia Sorabji. In *Social Thinkers of Modern India – Contemporaries of Swami Vivekananda* (7-9). NCERT, New Delhi.
- Srivastava, Gouri. 2014. Kadambini Ganguly. In *Social Thinkers of Modern India – Contemporaries of Swami Vivekananda* (28-30). NCERT, New Delhi.
- Yadav, M., Deshmukh. B. Gupta.P., and S. Pandey. 2015. Let's raise the Voice.... Talk it out. A bilingual self-help manual for adolescent girls. Book Age Publication. New Delhi.

**Paper Presentations**

- Nuna, Anita. 2014. Marginalisation of women in higher education in India. Paper presented in the national seminar on *Higher Education: Expectation and Expression*. Centre of Advanced Studies in Education (CASE), MSU, Baroda, Vadodara, 9-10 March.
- Nuna, Anita. 2015. Globalisation, disease and health care. Chaired a technical session in the national seminar on *Globalisation and Health*. Department



of Sociology, Aligarh Muslim University, Aligarh under DRS 1 (UGC), 29-30 March.

Nuna, Anita. 2015. Globalisation: Issues in women education and health. A speaker in the national seminar on *Globalisation and Health*. Department of Sociology, Aligarh Muslim University, Aligarh under DRS 1 (UGC), 29-30 March.

Nuna, Anita. 2015. National integration integral for international understanding. Chaired a session in the international conference on *World Peace – Perceptions and Practices*. Sri Sai College of Education, Badhani, Pathankot, Punjab, 28 February- 1 March.

Nuna, Anita. 2014. Innovative efforts for universalisation of elementary education. The key speaker in the national seminar on *To Educate the Minority Communities on Programmes and Schemes of the Ministry of Minority Affairs for Their Socio-economic and Educational Development*. Ajmal Foundation, Hojai, Nagaon, Assam, 22 June.

Nuna, Anita. 2015. Education for world peace – need of the hour. Key speaker in the international conference on *World Peace – Perceptions and Practices*. Sri Sai College of Education, Badhani, Pathankot, Punjab, 28 February- 1 March.

Srivastava, Gouri. 2014. Programme and monitoring. A panelist in the international conference on *Girls' and Women's Literacy and Education*. Foundations for Sustainable Development, Government of the People's Republic of Bangladesh and UNESCO, Dhaka, 8 September.

Srivastava, Gouri. 2014. Adolescent and gender issues. A panelist in the Regional Consultation for *Secondary School Functionaries to Strengthen the IEDSS Implementation*, Department of Education of Groups with Special Needs, NCERT, New Delhi, 29-31 December.

Srivastava, Gouri. 2015. Integration of other media for inclusion. A panelist in the national conference on Language and Inclusive Education, Department of Education in Language, NCERT, New Delhi, March 10-12.

Srivastava, Gouri. 2015. Keynote address in the national seminar on *Gender Sensitisation: Yesterday and Today*, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, February 25-27.

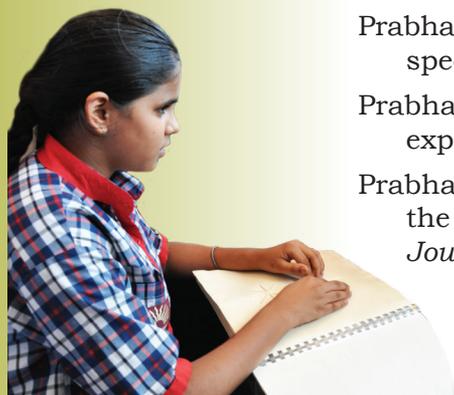
## **DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS (DESM)**

### **Research Papers/Articles**

Prabha, S. 2015. Problem solving using self-generated data: Learning concept of speed at upper primary stage. *European Scientific Journal*, 11(4), 351-361.

Prabha, S. 2014. Integrating assessment with teaching-learning of science: An experiment. *The Primary Teacher*, 39 (1&2), 47-55.

Prabha, S. and Kumar, R. 2014. Prospective science teachers' reflections on the use of learning strands in developing lesson design. *European Scientific Journal*, 1, 121-131.



## DEPARTMENT OF TEACHER EDUCATION (DTE)

### Research Papers/Articles

- Patel, M.S. and Pandey, S. 2015. Secondary teacher education curriculum in Mizoram— status, issues and challenges. *Education and Society, International Journal of Education and Humanities*. 4 (1). 328-342.
- Patel, M.S. and Pandey, S. 2014. Secondary teacher education in Sikkim – A field study. *Journal of Indian Education*. XXXX (2), 139-152.
- Patel, M.S. and Pandey, S. 2014. Secondary teacher education curriculum in Nagaland –status, issues and problems. *Journals of Education “CONFLUX”*, 2 (1), 36-43.
- Vijayan, K. and Ashraf, C. 2015. Classroom assessment: Independent or integrated? *Conflux Journal of Education*, 2 (8), 16-19.
- Vijayan, K. (In press). Teaching of mathematics in constructivist classroom – A field experience. *Journal of Indian Education*, XXXX (2).

### Book Chapter

- Vijayan, K. 2014. Nature of mathematics in what, why and how of mathematics. In BES-055 *Pedagogy of Mathematics*, Unit -1 ( 9-28), IGNOU, New Delhi.

### Paper Presentations

- Bhardwaj, B.P. 2014. Dialogue on teacher education curriculum for secondary school. A panelist in national congress of stakeholders for a dialogue on *Teacher Education Curriculum*, Faculty of Education, Banaras Hindu University, Kamachha, Varanasi, 17 November.
- Bhardwaj, B.P. 2015. Keynote address in a national seminar on Axiology in *Teacher Education: Present Context and Challenges*, Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth, New Delhi, 30 March.
- Vijayan, K. 2015. Assessment practices in constructivist classroom. Keynote address in the state level seminar on *Constructivist Classroom Practices*, Government College of Teacher Education, Bhagalpur, Bihar, 26 March.

## DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES (DESS)

### Book

- Vaidya, Shipra. 2014. *Developing Entrepreneurial Life Skills: Creating and Strengthening Entrepreneurial Culture in Schools*. Springer, New Delhi.

### Book Chapters

- Raveendran, Ashita. 2014. Application of mathematics in economics – Exemplar problems. In Srivastava, Seema (Ed.), *Enrichment material in economics – Manual* (65-69). SCERT, Delhi.
- Raveendran, Ashita., Ojha, Seema S. and Malik, Tannu. 2014. Social science at upper primary stage. In *Learning Indicators and Learning Outcomes at Elementary Stage* (146-161). NCERT, New Delhi.



**Research Papers/Articles**

- Kumari, P. 2014. Teaching 'Indian Economic Development' with case method *Journal of Teaching and Education*, 3 (1), 405- 419.
- Kumari, P., Singh, V. P. and Om, Hari. 2014. Economic evaluation of marigold varieties for inter cropping in newly planted orchards. *Global Education, Society and Development*. 6 (1), 101-106.
- Malik, Tannu. 2015. Enhancing mapping skills – Problems and possibilities. *Indian Journal of Applied Research*, 5 (4), 183-185.
- Ojha, Seema S. 2015. Creating an effective learning environment for visually impaired students: Assessing their perception of learning materials. *Research Journal of Educational Sciences*, 3 (1), 1-5.
- Ojha, Seema S. 2014. Itihas ki kaksha se: Ek anubhav. *Prathmik Shikshak*. 38 (3), 55-61.
- Pandey, A. 2014. Kriyakalapon ke madhyam se bhaugolik sankalpanaon ka sampreshan –Ek sarthak prayas. *Prathmik Shikshak*, 38 (3), 34-39.
- Srinivasan, M.V. 2015. Centralised evaluation practices: An ethnographic account of Continuous and Comprehensive Evaluation in a government residential school in India. *Contemporary Education Dialogue*, 12(1), 59-86
- Raveendran, Ashita. 2015. Relevance of need assessment: Study on enhancing mathematical skills of economics teachers at higher secondary stage. *Indian Journal of Applied Research*, 5 (3), 91-93.

**DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)****Article/Paper Presentations**

- Sudhir, Pawan and Kulkarni, Mrinal. 2014. Impact of art integrated curriculum on the learning and development of children from diverse cultural backgrounds. Paper presented in the workshop on *International Perspective of Research in Arts Education*. The Federal Ministry of Education and Research, Dusseldorf, Germany, 16-17 September.
- Sudhir, Pawan. 2015. Creative curriculum for policy dialogue. A panelist in the *Round Table Conference*, Lahore, Pakistan, 8-12 March.

**DEPARTMENT OF EDUCATION IN LANGUAGES (DEL)****Research Papers/Articles**

- Dubey, Pramod Kumar. 2015. Hindi mein vigyan vishayak lekhan. *Mangal Vimarsh*, I (2), 10-20.
- Kapur, Kirti. 2014. Inclusive practices. Fortell – *A Journal of Teaching English Language and Literature*, 29 (20), 5-7.
- Kapur, Kirti. 2015. Back to school with alternative assessment. *Language and Language Teaching*. 4, 8-15.
- Khan, Chaman Ara. 2014. Tadrees ke dauran janch. *Tadrees Nama*. 1 (5), 148-153.
- Khan, Diwan Hannan. 2014. Hindustan mein ishariyat sazi ki rawayat. *Fikro-Tahqeeq*. XVII (2), 8-17.



- Khar, Meenakshi. 2014. Education – As is understood. *Journal of Education in Emerging Indian Society*. I (1), 211-215.
- Khar, Meenakshi. 2014. School ki shikshan paridhi – Chintan aur sansmaran. *Prathmik Shikshak – Shaikshik Samvad ki Patrika*, 3 (3), 30-34.
- Kohli, Naresh. 2014. A dialogue with famous Hindi novelist Bhagwan Das Morwal. *Samavartan*, 8, 23-27.
- Kumar, Neelkanth. 2014. Kavita Padhna-Padhana, *Prarambh*, 3-4, 27-31.
- Meganathan, R. 2014. When a rape happens. *Research Scholar*. 2 I (III), 891.
- Meganathan, R. 2015. English language education situation in India. *Journal of Indian Education*. 40 (IV). 100-116.
- Mohd., Moazzamuddin. 2014. Zameeruddin Ahmad ki afsana nigari, – *Urdu Nama*, 2(2), 270-294.
- Mohd., Moazzamuddin. 2014. *Fikr-o-Tahqeeq, Quarterly, Necpui*, 17 ( 3), 105-118.
- Mohd., Moazzamuddin. 2014. Hasrat Mohani ghazal ke aaine mein tarseel. Directorate of Distance Education, University of Kashmir, Srinagar, 12, 79-93.
- Suman, Sanjay Kumar. 2014. Kendriya Vidyalaya, Kahalgaon. *Prathmik Shikshak – Shaikshik Samvad ki Patrika*, 3, 62-70.
- Suman and Kumar, Sanjay. 2014. Subhadraji ke sahitya ka samajik sarokar. *Shodh Samalochan*. I (4), 5-10,

### **Books**

- Khan, Chaman Ara. 2014. *Chuhiya aur chidiya* (Story Prabhat). Room to Read India. New Delhi.
- Khan, Chaman Ara. 2014. *Lali ko ek beej mila* (Story Sushma Sarpal). Room Read India. New Delhi.
- Khan, Chaman Ara. 2014. *Kutty* (Story Pramod Pathak). Room Read India. New Delhi.
- Kumar, Neelkanth. 2014. *Kumar Vikal ka kavya-sansar*. Aakhar Prakashan. Delhi.
- Suman, Sanjay Kumar. 2014, *Swatantra Hindi kahani – Mulya aur mulyankan*. Lata Sahitya Sadan. Ghaziabad.
- Tripathi, Krishna Chandra. 2014, *Preranaloka*. Manyata Prakashan. New Delhi.

### **Book Chapters**

- Ansari, Mohd. Faruq. 2015. Basit Bhopali ki shayeri mein ravaiye ka nayapan. In Siddiqui, Kauser (Ed.), *Bisat-e-Ghazal* (26-32). Dabistan-e-Bhopal, Bhopal.
- Khan, Diwan Hannan. 2014. Pandit Birij Mohan Dattatarya Kaifi. In *Social Thinkers of Modern India* (41-45). NCERT, New Delhi.

### **Paper Presentations**

- Dubey, Pramod Kumar. 2014. Sahitya ka bhavishya. Paper presented in the Pawas *Vyakhyan Mala*, Hindi Bhawan, Bhopal, 16-17 August.



- Kapur, Kirti. 2014. Culture, context and curriculum with reference to world English. Paper presented in the *20th IAWA International Conference*, Amity University, Noida, Delhi, 18-20 December.
- Kapur, Kirti. 2015. Language and inclusion. Paper presented in the national conference on *Language and Inclusive Education*. DEL, NCERT, New Delhi, 10-12 March.
- Khan, Chaman Ara. 2015. Inclusion of language education. Paper presented in the national conference on *Language and Inclusive Education*, DEL, NCERT, New Delhi, 10-12 March.
- Sadayat, Chandra. 2015. Sant Ravidas vividh aayam. Paper presented in the International seminar on *Sant Guru Ravidas*, NCERT, New Delhi, 10-12 March.
- Singh, Sandhya. 2015. Language and inclusion. Paper presented in the national conference on *Language and Inclusive Education*, DEL, NCERT, Delhi, 10-12 March.
- Singh, Sandhya. 2014. Language curriculum. Paper presented in the seminar on *Curriculum Development*, Gujarat Education Board, Ahmedabad, 7-8 August.
- Ansari, Mohd. Faruq. 2015. Language and literature in schools. Chaired a session in the national seminar on *Language Pedagogy*, NCERT, New Delhi, 16-20 March.
- Dubey, Pramod Kumar. 2015 Language and inclusive education. Chaired a session in the national seminar on *Language Pedagogy*. NCERT, New Delhi 16-20 March.
- Kapur, Kirti. 2014. Curriculum rationale. Chaired a session in the international conference on *Role of ETL in Education for Sustainable Development*, Amity University, Lucknow, 24-25 May.
- Kapur, Kirti. 2014. English language teaching (methods). Chaired a session in the international conference on *English from Classes to Masses*, ELTAI and V.G. University, Jaipur, 21-23 August.
- Kapur, Kirti. 2015. Exploring dimensions that humanise: Literature as a resource in an ELT classroom. Chaired a session in the international conference on *English Language and Literature – A Tool for Humanising*, Lingaya's University, Faridabad, 23-24 February.

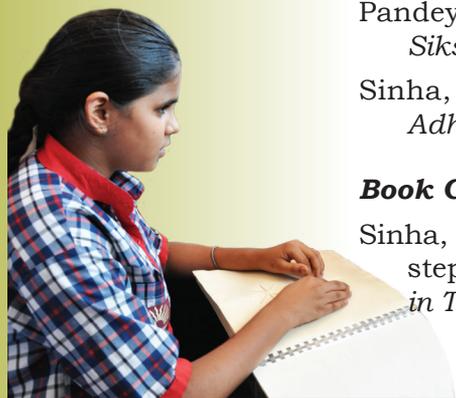
## **RMSA PROJECT CELL**

### **Research Papers/Articles**

- Pandey, Sharad Kumar. 2014. Sikshako ne banaye kahaniya. *Prathamik Sikshak*, 38(2), 12.
- Sinha, Sharad, Alka. 2014. Safarnama – Kagaz se screen tak, *Bhartiya Adhunik Shiksha*, 34, 3, 72-79.

### **Book Chapters**

- Sinha, Sharad. 2014. In-service professional development of the teachers – A step towards quality development. In Kauts, Amit (Ed.), *Quality Concerns in Teacher Education*. (33-36). Twenty First Century Publications, Patiala.



### **Paper Presentations**

- Arora, R. 2014. NCF-2005: Overall perspectives and implementation. Presented a paper in the seminar on *Curriculum Development*, Knowledge Consortium of Gujarat, Ahmadabad, 7-8 August.
- Arora, R. 2014. Constructivist Learning, Pedagogy and Assessment. Presented a paper in the seminar on *Curriculum Development*, Knowledge Consortium of Gujarat, Ahmadabad, 7-8 August.
- Arora, R. 2014. Coordinated decentralised system for quality enhancement through School Self Evaluation (SSE) (Roles and responsibilities of boards/ councils). Paper presented in the *COBSE's Annual Conference 2014-15*, Gandhinagar, Gujarat, 7-9 November.
- Pandey, S.K. 2014. Understanding and addressing quality concerns in North-East Region in context of quality monitoring programme under SSA. Paper presented in the national seminar on *Improving Learning Outcome at School Level: Issues in Policy Planning and Implementation*, North-Eastern Council Secretariat, Shillong, 15-16 October.
- Pandey, S.K. 2014. Relooking findings of INSET impact study for quality in-service teacher training in the North-East Region: A Nagaland experience. Paper presented in national seminar on *Improving Learning Outcome at School Level: Issues in Policy Planning and Implementation*, North-Eastern Council Secretariat, Shillong, 15-16 October.
- Pandey, S.K. and Mahanta, B.B. 2014. Early Literacy Programme in North-East India: Status, challenges and suggestions. Paper presented in national seminar on *Improving Learning Outcome at School Level: Issues in Policy Planning and Implementation*, North-Eastern Council Secretariat, Shillong, 15-16 October.
- Sinha, S. 2015. Teacher leadership and motivation. Paper presented in the national seminar on *Emerging Frontiers of Education Technologies*, Centre for Human Resource Development, Bangalore, 4 March.

## **DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION (DEPFE)**

### **Research Papers/Articles**

- Hussain, Imran., Sia, Surendra Kumar and Mishra, Prabhat Kumar. (2014). Workplace deviance and the menace of some antecedents: A review of extant literature. *Indian Journal of Health and Wellbeing*, 5 (7), 788-795.
- Mishra, Prabhat Kumar. 2014. Sources and consequences of stress: A call for action. *Indian Journal of Health and Wellbeing*, 5 (8), 985-989.
- Mishra, Prabhat Kumar. 2014. An analysis of role stress factors as perceived by secondary school teachers. *International Journal of Education and Management Studies*, 4 (3), 228-230.
- Mishra, Prabhat Kumar. 2014. Stress and coping: Some critical issues. *Indian Journal of Positive Psychology*, 5 (3), 341-343.



**Book Chapters**

- Pant, D. 2014. Education and values. In Srivastava A.K. (Ed.), *Basics of education* (225-245). NCERT, New Delhi.
- Pant, D. 2014. Gender-role socialisation, stereotype, government policies and development. In Tripathi, R.C., and Sinha, Yogananda (Eds.), *Psychology, Development and Social Policy in India* (285-296). Springer, Delhi.

**EDUCATIONAL SURVEY DIVISION (ESD)****Research Papers/Articles**

- Bhushan, Satya. 2014. Inclusion in early childhood care and education in India: Progress and pauses. *ARNEC Connections – working together for early childhood*, 8, 31-33.
- Singh, V.P. 2013. Examination stress: Case study of suicides among school students. *Teacher Support*, 2(2), 1-15.
- Singh, V.P. 2013. What every teacher should know to reduce examination stress: Some intervention strategies, *Journal of Indian Education*, (XXXIX (3), 109- 126.
- Sreekanth, Y. 2014. Education in a low free private unaided recognised school: A Case Study. *Learning and Teaching Journal*, 7 (2), 55-68.
- Sukhvinder and Kamath, Asha, K.V.D. 2014. Effect of map based learning activities on the development of map reading skills among students at secondary level. *Journal of Indian Education*, XXXX (2), 99-107.

**Paper Presentations**

- Kumar, Santosh and Bhushan, Satya. 2014. Mathematics achievement of Class V students in North-Eastern States: Some reflections from NAS Class - 4 (Cycle IV). Paper presented in the national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation*, Shillong, 15-16 October.
- Singh, V.P. 2014. Role of researches in uplifting the standard of society in context of Indian universities. Paper presented in the national seminar on *Transformation of Indian Educational Structure: A Revolution to Strengthen Socio-Economic Status*, Baikunthi Devi Kanya Mahavidyalaya, Agra, 18-19 October.

**DIVISION OF EDUCATIONAL RESEARCH (DER)****Research Papers/Articles**

- Pal, Rajendra. 2014. Perception of teacher educators about information and communication technology and its accessibility. *Journal of Advanced Studies in Education and Management*, 1(2), 98-104.
- Pal, Rajendra and Pallai, Pratima. 2014. Placement of questions during perception in capacity building programme of teacher educators through video conferencing. *Journal of Advanced Studies in Education and Management*, 1(1), 1-6.



Pal, Rajendra. 2014. Online assessment of students: An experience of CIET online course on action research in educational technology. *Journal of Indian Education*, XXXIX (1), 141-144.

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### **Books**

Pal, Rajendra and Pallai, Pratima. 2014. EDUSAT: Capacity Building of Teachers and Educators. Global Books Organization, New Delhi.

Srivastava, A.K. (Ed.) 2014. *Basics in Education: Textbook for B.Ed. Course*. NCERT, New Delhi.

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Pal, Rajendra and Pallai, Pratima. 2015. Teacher orientation programmes through EDUSAT: Qualitative inquiry of some concerns. In Nikose R. L. (Eds.), *Essentials of Educational Technology (100-113)*. A.P.H Publishing Corporation, New Delhi.

### **Paper Presentations**

Pal, Rajendra. 2015. Teacher education and media. Paper presented in the national seminar on Reengineering Education: *Context and Content*, P.G. Department of Education, University of Jammu, 13 March.

Srivastava, A. K. 2014. Chaired a session in the national seminar on *Health and Well-being: Recent Developments and Challenges*, Jamia Millia Islamia, 12-13 November.

## **PLANNING AND MONITORING DIVISION (PMD)**

### **Research Papers/Articles**

Subhash, P.D. 2014. Research in India: Ethical issues and copyright rules. Proceedings of the national seminar on *Paradigms of educational research for the 21st century equipping gen next with reflective approaches*. Avila College of Education, Edacochin, Cochin, Kerala, 5-6 December.

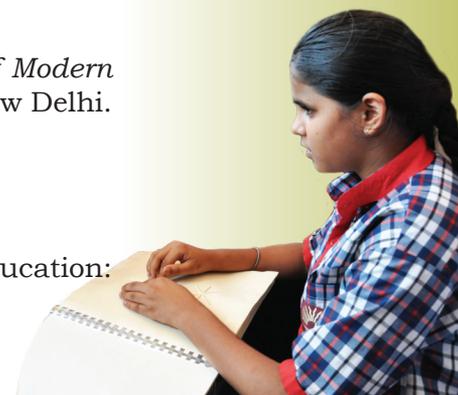
### **Book Chapter**

Anwar, Siraj M. 2014. Sir Syed Ahmed Khan. *In Social Thinkers of Modern India: Contemporaries of Swami Vivekananda (51-55)*. NCERT, New Delhi.

## **INTERNATIONAL RELATION DIVISION (IRD)**

### **Book Chapter**

Agrawal, Poonam. 2014. Values: Concept and context. *In Basics in education: Textbook for B.Ed. course (202-224)*. NCERT, New Delhi.



**Paper Presentations**

Agrawal, Poonam. 2015. TVET research: Some issues and challenges. Paper presented in *International Conference on Emerging Trends in TVET: Vision 2025*. PSSCIVE, Bhopal. 18-20 February.

Agrawal, Poonam. 2014. Integration of home/farm sciences for rural development and women empowerment. Chaired the session in *Second UP Agricultural Sciences Congress*, UPCAR, Lucknow. 14 June.

**LIBRARY AND DOCUMENTATION DIVISION (LDD)****Research Paper/Article**

Samantaray, Moortimatee. 2014. Towards technology enabled learning: library and information science education through open and distance learning: some issues and concerns. *Proceedings of the national seminar on LIS Education in India with special reference to ODL Prospect and Retrospect*. DLIS and University Library, 124-129.

**CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)****Book Chapter**

Behera, A.P. 2014. ICT and pedagogy integration with special focus on constructivist approach using web 2.0 tools in teaching-learning process. In Kaults, Amit (Ed.), *Quality Concerns in Teacher Education (26-32)*. Twenty First Century Publication. Patiala.

**PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE), BHOPAL****Research Paper/Article**

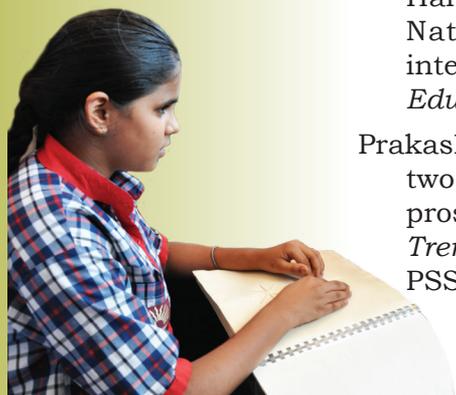
Yasin, Asfa M. 2014. Quality in education versus no detention policy. *International Journal of Social Science in Humanities Research*. 2(3), 27-30.

**Paper Presentations**

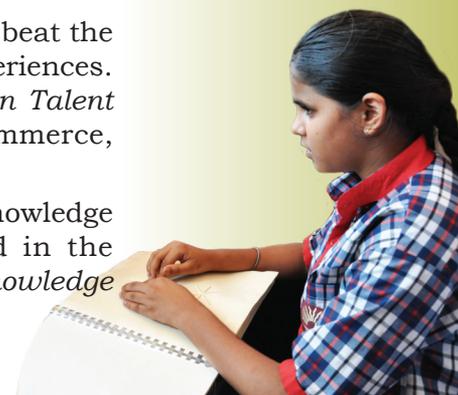
Khanna, P. 2015. Gender issues in home science vocational education in India. Paper presented (through poster) in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.

Mehrotra, V.S. 2015. Attitude of principals of higher secondary schools of Haryana towards learning outcome based vocational education under National Skills Qualifications Framework. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.

Prakash, Saurabh. 2015. Skill development training in informal sector of two wheeler automobile industry in India: Present practices and future prospects. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.



- Prakash, Saurabh. 2015. Electronic portfolio – A reliable skill assessment technique in vocational education: Present practices and future prospects. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.
- Prakash, Saurabh. 2015. Issues and challenges in implementation of recognition of prior learning in agriculture sector: Present practices and future prospects. Paper presented in the International Conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.
- Veeraiah P., G. Chaitanya and Sakya, Hemalatha. 2014. Prospects of commodity derivative market in India – special reference to NMCEIL. Paper presented in the national seminar on *Commodity Derivative Trading in India – Issues and Concerns*. Department of Commerce, University College of Commerce and Business Management, Osmania University, Hyderabad, 7-8 August, 2014.
- Veeraiah P., Geeta Tomar and G. Chaitanya. 2014. Impact of social media marketing on the business – special reference to linked. Paper presented in the Fourth International Conference on *Innovative Business Practices for Creating Value in Global Era*. Acropolis Faculty of Management and Research, Acropolis North Campus, Indore, 24 December, 2014.
- Veeraiah P., G. Chaitanya and Sakya, Hemalatha. 2014. Corporate social responsibility initiatives for enhancing the community development – A case study of APIL. Paper presented in the *67th All India Commerce Conference of Indian Commerce Association and International Seminar on Corporate Social Responsibility and Sustainability*. KIIT University, Bhubaneswar in Association with P. G. Department of Commerce, Utkal University, Bhubaneswar, 27- 29 December.
- Veeraiah P., Geeta, Tomar and Chaitanya, G. 2014. Social media marketing impact on Madhya Pradesh business operations – A study. Paper presented in the *67th All India Commerce Conference of Indian Commerce Association and International Seminar on Corporate Social Responsibility and Sustainability*. KIIT University, Bhubaneswar in Association with P. G. Department of Commerce, Utkal University, Bhubaneswar, 27- 29 December.
- Veeraiah P., Sunil, Desai and Chaitanya, G. 2015. Issues regarding FDI entered in Indian retail sector – Some experiences. Paper presented in the *HSB 7th Annual National Conference on Business and Management*. Haryana School of Business, Guru Jambheshwar University of Science and Technology, Hisar, Haryana, 12-13 February.
- Veeraiah P., Geeta, Tomar and Desai, Sunil. 2015. Indian industries beat the world business through talent management strategies – Some experiences. Paper presented in the *International Round Table Conference on Talent Management and Knowledge Management*, Department of Commerce, Bharati Vidyapeeth University, Pune, 15 February.
- Veeraiah P., Assudhanvi, Mahesh and Rithe, Balakrishna. 2015. Knowledge capital challenges before the management. Paper presented in the *international round table conference on Talent Management and Knowledge*



*Management*, Department of Commerce, Bharati Vidyapeeth University, Pune, 15 February.

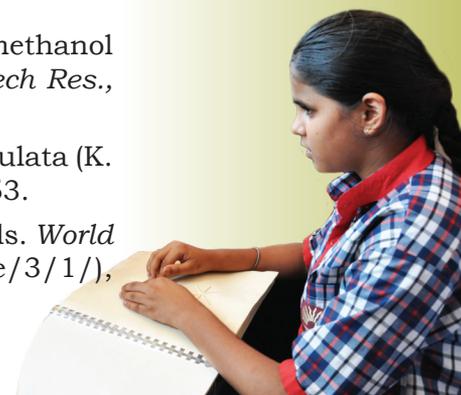
- Veeraiah P., Desai, Sunil and Saxena, Renu. 2015. Outcomes based teaching and learning in vocational education-special reference to NSQF. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February, 2015.
- Veeraiah P., Shukla, R.K. and Shivagunde, R.B. 2015. Vocationalisation of secondary and higher secondary education – A study on policy perspectives. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision- 2025*, PSS Central Institute of Vocational Education, Bhopal in collaboration with Madhya Pradesh Council of Science and Technology, Government of M. P., 18-20 February.
- Veeraiah P., Yasin, Asfa M. and Tomar, Geeta. 2015. Quality concerns for vocational teachers preparation– A Study. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.
- Veeraiah P., Tomar, Geeta and Desai, Sunil. 2015. Enhancing skills and faster generation of employment in India through skill development initiatives – A study. Paper presented in the first international conference on *commerce and management on Demographic Dividend and Industrial Development with Inclusive Approach: A Road Ahead*. Department of Commerce and Management, Shivaji University, Kolhapur, 2-3 March.
- Yasin, Asfa M. 2014. Practices for ensuring quality in technical and vocational education and training in India. Paper presented in the international conference on *Emerging Trends in Technical and Vocational Education and Training: Vision 2025*. PSSCIVE, Bhopal, 18-20 February.

### **REGIONAL INSTITUTE OF EDUCATION, AJMER**

- Arya, A.K. 2014. A tandem and domino protocol for synthesis of chromeno-, pyrano- and quinolinofused spiro[pyrazolo[3,4-b]pyridine-indolines. *Current Organic Chemistry*, 18, 2555-2560.
- Arya, A.K. 2014. A facile synthesis and anticancer evaluation of spiro analogues of benzothiazolylchromeno/pyrano derivatives. *Letters in Drug Design and Discovery*, 11, 594-600.
- Barthakur, Bidyadhar. 2014. Wild grasses used by the tribes of Dungarpur and Banswara district of Rajasthan, India. *Advances in Plant Sciences*, 27(1), 163-164.
- Barthakur, Bidyadhar. 2014. Utilisation of forest plants in nutrition and health care practices by Tangsa tribes of Arunachal Pradesh, India. *Advances in Plant Sciences*, 27(1) 133-136.
- Barthakur, Bidyadhar. 2014. Antimicrobial activities of hygrophila auriculata (K.Schum) Heine. *Research J. Pharm. And Tech*, 7(5), 550-553.
- Barthakur, Bidyadhar. 2014. Arbuscular mycorrhizal association, its potentiality to improve wasteland inside proposed Kaziranga Biosphere Reserve, Assam, India. *Mycorrhiza News*. 26 (3), 2-3.



- Chandrasekhar, K. 2014. Learning levels of grade V students in environmental studies. *The Indian Journal of Educational Assessment*, 4 (1), 4-11.
- Chandrasekhar, K. 2014. A comparative study of multiple-choice questions and interactive mode formats for conducting the National Achievement Survey at the end of Class III, *The Indian Journal of Educational Assessment*, 4 (2), 10-19.
- Goswami, Ayushman. 2014. Theatre education: An innovative of teaching language. *Edu Explorer, The Journal of Education. Education Foundation*.1(3), 84-88.
- Gupta, Ashwani Kumar. 2014. Ecological conditions in India concerning habit, habitats and sustenance of life. *Journal of Natural Science*. 2(1), 1-4.
- Gupta, Ashwani Kumar. 2014. Inter-relationship among environmental resources. *Journal of Natural Science*. 2(1) 31-36.
- Gupta, Ashwani Kumar. 2015. Comparative study of attitude towards environment of adolescents studying in higher secondary class in Jaipur. *International Research for Intellectual Science and Management*. 8, 66-77.
- Gupta, Ashwani Kumar. 2015. Trends in the development of the environmental education and evaluation in India. *International Research for Intellectual Science and Management*. 8, 41-47.
- Hasan, Muzammil. 2015. Assistive technologies, enabling access to inclusive classrooms. Conference Proceedings of the *International Conference on Learning Technologies*, Jamia Millia Islamia, New Delhi, 24-25 February.
- Jha, B.K. 2015. Library automation. Proceedings of the National Seminar on utility of SOUL software for library automation. Government College, Barghat, Seoni, 2-3 March.
- Kakaria, V.K. 2014, Influence of chlorella vulgaris on copper metal caused phosho-glucosyltransferase variation in different brain regions of teleosts due to detoxification. *Ecology Environment and Conservation. International Journal of Applied Agricultural Research*, 30(2), 185-189.
- Kamath, Asha KVD. 2014. An assessment of awareness of rights of the child among the students of Class X. *MIER Journal of Educational Studies, Trends and Practices*. 4 (2), 254-261.
- Kamath, Asha KVD. 2014. Effectiveness of participatory learning in developing understanding on RTE Act, 2009 among teachers. *Edu Explorer, The Journal of Education*. 2 (4), 10-17.
- Kamath, Asha KVD. 2014. A study of Kasturba Gandhi Balika Vidyalayas of Chikkaballapura district of Karnataka. *Mangalmay Journal of Education and Pedagogy*. 5 (1), 10-15.
- Nainawat, Anil Kumar. 2014. Electro-organic synthesis of 2-pyridyl methanol at SS-316 electrode in basic aqueous medium. *Int. J. Chem. Tech Res.*, 6(1), 361-365.
- Pareek, Ram Babu. 2014. Anti-microbial activities of hygrophila auriculata (K. Schum) heine. *Journal Research J. Pharm. and Tech*. 7(5), 550-553.
- Pareek, Ram Babu. 2015. Concept maps in organic chemistry practicals. *World Journal of Chemical Education*. <http://pubs.sciepub.com/wjce/3/1/>, 3 (1), 22-26.



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- Sharma, S.V. 2014. Transport and structural properties of High Tc superconductors. *Journal for Advanced Research in Applied Sciences*, 1 (1), 1-9.
- Sharma, S.V. 2014. A study of the impact of constructivist approach on students' understanding the concepts of work, energy and power at senior secondary level. *International Journal of Science and Research*, 3 (7), 2162-2171.
- Sharma, S.V. 2014. Learn more about micro-electromechanical system. *International Journal of Innovative Research and Review*, 2 (2) 51-53.
- Singh, Nagendra. 2015. An analysis of differences between government and private elementary schools in terms of teacher stress and its effect on teacher efficiency. *International Research Journal for Multidisciplinary Studies*, 1(5), 8-15.
- Singh, V.P. and Hussain, Ahrar. 2014. Multimedia in science to develop pedagogical content knowledge of prospective elementary teachers. *Jamia Journal of Education, An International Biannual Journal*, 1(2), 60-69.
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- Yadav, Saryug. 2014. English language education: contexts and concerns. *Language Forum. A peer reviewed International Journal*, 40, (1-2), 32-45.
- Yadav, Saryug. 2015. English language education: Changing paradigm in curriculum. *Indian Journal of English Studies*, II. 248-258.
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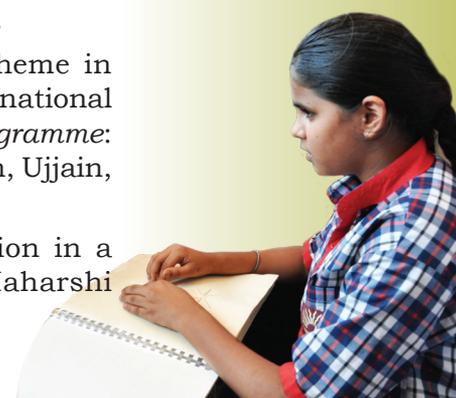
- Kataria, Sudhir Kumar. 2014. *Next Generation Sciences: Vision 2020 and Beyond*. MDU, Rohtak.
- Mishra, Rajesh. 2014. *Talib Banarasi Hayat aur Karname*. Arshia Publication, Delhi.
- Singh, Nagendra and Singh, R.P. 2014. *Shikshan Avam Adhigam ke Mano-Samajik Adhar*. Agarwal Publications, Agra.
- Yadav, Saryug. 2014. *Challenges of Teaching English Language and Literature in the Age of Globalisation*. Lakshi Publishers, New Delhi.

### **Paper Presentations**

- Agarwal, P.C. and Agarwal, I.B. 2015. Role of parents in the development of social competency among adolescents. Paper presented in the national



- seminar on *Adolescence Education : Status and Its Future Perspectives*, RIE, Ajmer, 4-5 February.
- Agarwal, P.C. and Agarwal, I.B. 2015. A study of effectiveness of constructivist approach versus traditional teacher centred approach. Paper presented in the regional seminar-cum-meet on *Science Education*, RIE, Ajmer, 28 February.
- Arya, A.K. 2014. A green chemical domino protocol for the synthesis of structurally diverse dihydroarylpyrimidine-2-thiones derivatives. Paper presented in the national conference on *Green Chemistry*, Govt P.G.College, Dausa, Rajasthan, 15-16 December.
- Arya, A.K. 2014. SFIL catalysed green chemical domino protocol for the synthesis of structurally diverse fluorinated dihydroarylpyrimidine-2-thiones derivatives. Paper presented in the National Conference on *Frontiers at the Chemistry-Allied Sciences Interface* at Centre of Advanced Study, Department of Chemistry, University of Rajasthan, Jaipur, 13-14 March.
- Arya, A.K. 2015. Micro-scale lab centred approach to understand the chemistry of gases. Paper presented in the *Regional consultation-meet-cum-Seminar on Science Education*, RIE, Ajmer, 28 February.
- Chandrasekhar, K. 2015. Sharing of best innovative classroom practices of teaching learning of science. Chaired the session in the regional consultation-cum-meet seminar on *Science Education*, RIE, Ajmer, 28 February.
- Hasan, Muzammil. 2015. Ubiquitous adolescents and cyber crime – stakeholders, roles and reining. Paper presented in the seminar on *Adolescence education: Status and its future perspectives*, RIE, Ajmer, 5-6 February.
- Jha, B.K. 2015. Boon for school community: NROER. Paper presented in the regional meet-cum-seminar on *Science Education*, RIE, Ajmer, 28 February.
- Jha, B.K. 2015. Library automation. Chaired a session in the national seminar on *Utility of SOUL Software for Library Automation*. Government College, Barghat, Seoni, 2-3 March.
- Kamath, Asha K.V.D. 2015. Implementation of RTE Act, 2009. Chaired a session in the national seminar on *Implementation of RTE Act, 2009 and Mid-Day Meal Programme: Promises and Challenges*, M.P. Institute of Social Science Research, Ujjain, 25-26 March.
- Kamath, Asha K.V.D. 2015. RTE Act, 2009 and role of teachers. Chaired a session in the national seminar on *Sensitisation of Teacher Educators on RTE Act, 2009: Overcoming the Current and Future Problems*, Ramakrishna Mission Vidyalaya College of Education, Coimbatore, 24-25 April.
- Kamath, Asha K.V.D. 2015. Implementation of mid-day meal scheme in Chikkaballapura District of Karnataka. Paper presented in the national seminar on *Implementation of RTE Act, 2009 and Mid-day Meal Programme: Promises and Challenges*, M. P. Institute of Social Science Research, Ujjain, 25-26 March.
- Kataria, S.K. 2015. Drugs/biopharmaceuticals. Chaired the session in a national seminar on *Innovative Researches in Life Science*, Maharshi Dayanand University, Rohtak, 21 February.



- Kataria, S.K. 2015. Curriculum and evaluation in science. Chaired a session in the regional consultation-cum-meet seminar on *Science Education*, RIE, Ajmer, 28 February.
- Kataria, S.K. 2015. Awareness about pesticide induced histotoxicity in non-target organisms. Paper presented in the Regional meet-cum-seminar on *Science Education*, RIE, Ajmer, 28 February.
- Kataria, S.K. 2015. Awareness about HIV status among adolescent students: A case study. Paper presented in the seminar on *Adolescence Education: Status and its Future Perspectives*, RIE, Ajmer, 5-6 February.
- Meena, Meenakshi. 2015. Impact of ICT on adolescents: A perception. Paper presented in the national seminar on *Adolescence Education: Status and its Future Perspectives*. RIE, Ajmer, 5-6 February.
- Mishra, Rajesh. 2015. Adolescent Education: Status and its Future Perspective. Chaired a session in the seminar on *Adolescent Education: Status and its Future Perspective*, RIE, Ajmer, 5-6 February.
- Nainawat, Anil Kumar. 2014. Green chemical synthesis of optically pure 1-(4-amino phenyl) ethanol. Paper presented in the national conference on *Recent Trends in Research in Chemical Sciences (RTRCS-2014)*, Department of Chemistry, Manipal University, Jaipur, February, 21-22.
- Nainawat, Anil Kumar. 2014. Greener procedure for synthesis of optically pure alcohols of pharmaceutical interest. Paper presented in the national conference on *Green Chemistry : Bridge Between Energy and Environment*, Pt. N. K. S. Government P.G. College, Dausa, Rajasthan, 15-16 December.
- Nainawat, Anil Kumar. 2014. Electrochemical synthesis of 1-(2-hydroxy) ethanol using SS-316 electrode in basic aqueous medium. Paper presented in the national conference on *Frontiers at Chemistry Allied Science Interface*, Deptt. of Chemistry, U.O.R., Jaipur, 13-14 March.
- Nainawat, Anil Kumar. 2014. Greener alternatives to qualitative analysis of cations. Paper presented in the regional meet-cum-seminar on *Science Education*, RIE, Ajmer, 28 February.
- Pareek, Ram Babu. 2014. In-vitro anti-microbial and phytochemical analysis of water extract of piper longum (long pepper) linn. Paper presented in the UGC sponsored national conference on *Green Chemistry: Bridge between Energy and Environment*, Govt. College Dausa, 15-16 December.
- Pareek, Ram Babu. 2015. In-service teachers understanding of column chromatography a versatile separation technique. Paper presented in the national conference on *Frontiers at the Chemistry- Allied Science Interface*, Dept. of Chemistry, University of Rajasthan, Jaipur. 13-14 March.
- Ranjan, Rajiv. 2015. Socio-cultural issues related to adolescent girl child with disabilities in India and future perspective of their inclusion. Paper presented in the seminar on *Adolescence Education: Status and its Future Perspectives*, RIE, Ajmer, 6 February.
- Sharma, S.V. 2015. Learning the concepts of physics through constructivist approach. Paper presented in the regional consultation-cum-meet on *Science Education*, RIE, Ajmer, 28 February.



- Sharma, S.V. 2015. Scientific knowledge and pedagogy. Chaired a session in the regional consultation-cum-meet seminar on *Science Education*, RIE, Ajmer, 28 February.
- Sharma, S.V. 2015. Major shifts in education programme: Teaching for thinking and quality learning. Keynote address in a national seminar on *Ethics and Educational Development*, Ajmer Institute of Technology, Rajasthan, 7 January.
- Sharma, S.V. 2015 Adolescence education: Life skills. Chaired a session in the seminar on *Adolescence Education: Status and its Future Perspectives*, RIE, Ajmer, 5-6 February.
- Singh, V.P. and Hussain, Ahrar. 2015. Multimedia for teaching-learning of science at elementary level. Paper presented in the international education conference on *Learning Technologies in Education*, Faculty of Education, Jamia Millia Islamia, New Delhi, 24-25 February.
- Singh, V.P. 2015. Preparing teachers for developing life skill among students: A case study. Paper presented in seminar on *Adolescence Education: Status and its Future Perspectives*, RIE, Ajmer, 5-6 February.
- Singh, V.P. and Hussain, Ahrar. 2015. Comparing effectiveness of hands-on activities and multimedia science content in teaching-learning of science. Paper presented in the regional consultation-cum-meet seminar on Science Education, RIE, Ajmer, 28 February.
- Singh V.P. 2015. Adolescent health and education. Chaired a session in the seminar on *Adolescence Education: Status and its Future Perspectives*, RIE Ajmer, 5 February.
- Yadav, Saryug. 2014. English Language Teaching: A constructivist approach. Paper presented in the *59th All India English Teachers Conference (AIETC)*, Rajasthan Technical University, Kota, 18-20 December.
- Yadav, Saryug. 2014. National development through teacher education. An invited lecture in an ICSSR sponsored national seminar on *National and Social Development through Teacher Education*, Krishna Mahila Teachers Training College, Udaipur in collaboration with Faculty of Education, Mohan Lal Sukharia University, Udaipur, Rajasthan, 17-18 October.

## **REGIONAL INSTITUTE OF EDUCATION, BHOPAL**

### **Research Papers/Articles**

- Haque, Rizvanul. 2014. Ghalib ka Tasavvur-e-Shahr aur Dilli, *Urdu Research Journal* 1 (3), 30- 44.
- Kumar, Saurabh. 2015. A study of the perspective of pupil-teachers of NCTE recognised teacher training institutions regarding their teacher training programme. *Education Today*, 1 (1), 341-348.
- Pandagale, Sanjay K. 2014. Curriculum development in India: A historical perspective. *ADROITIC International Journal*, 1 (2), 64-72.
- Pandagale, Sanjay K. 2015. Strategies for teachers' professional development in vocational education. *Education Today*, VI (1), 337-340.



- Pandagale, Sanjay K. 2015. Teachers' need for professional development in vocational education. *ADROITIC International Journal*, 1 (3), 26-28.
- Prajapati, R.P. and Singhai, R. 2014. Promotion of skill for construction of knowledge in content of science through ICT. *Teachers Pride*, 1(1), 23-25.
- Prajapati, R.P. and Singhai, R. 2014. Science teaching and learning through quality education in schooling. *Teachers Pride*, 1(3), 7-9.
- Prajapati, R.P. (2014). Development of skill for understanding of teaching-learning process in chemistry concepts at 11th grade. *IJFAR*, 1(11), 30-36.
- Prajapati, R.P. and Singhai, R. 2014. Pesticides and environment with special reference to human health. *Global Journal of Multidisciplinary Studies*, 3 (4), 97-104.
- Prajapati, R. P. and Singhai, R. 2014. Tools and techniques for Continuous Comprehensive Evaluation at elementary stage. *Teachers Pride*, 1(7), 31-33.
- Singh, Chitra. and Upadhyaya, S.K. 2014. Ultrasonic study, Rao formalism, compressibility behaviour and solvation number of magnesium soaps in non-aqueous medium. *Asian Journal of Advanced Basic Science*, 3(1), 139-143.
- Sharma, R. and Sharma, A. 2013. Status of environmental concerns among the students of upper primary level: Reflections on content, pedagogy and teachers role. *Research Pool*, 3 (1), 15-20.
- Tripathi, P.K. 2015. Inclusive library for inclusive teaching learning. *Proceedings of the National Seminar on Inclusive Education*, Ratibad, Bhopal, 13-14 April.
- Tripathi, P.K. 2015. Managing e-materials in academic libraries. *Proceedings of the National Conference on Contrivance of Academic Libraries in Digital Era*, Vikram University, Ujjain, 6-7 February 2015.

### **Book**

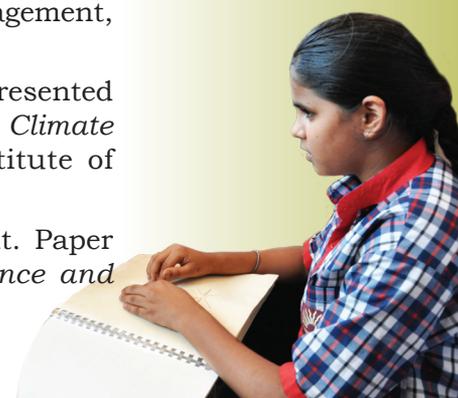
Haque, Rizvanul. 2015. *Bazar Mein Talib*. Arshiya Publications, New Delhi.

### **Paper Presentations**

- Arya, Ratnamala. 2014. Influence of gender and parental profession on problem solving ability. Paper presented in the national meet on *Mathematics Education*, RIE, Bhopal, 21-23 December.
- Arya, Ratnamala. 2015. Community participation: The cradle for the conversation of bio-diversity. Paper presented in the regional meet on *Science Education*, RIE, Bhopal, 28 February.
- Arya, Ratnamala. 2015. Urdu aur Hindi ki adabi virasatein Urdu aur Hindi ke saanvi nisaab me nazm ke tanazzur me. Paper presented in the national seminar on *Saanjhi Shahadat Saanjhi Virasat*, RIE, Bhopal, 28-29 March.
- Arya, Ratnamala. 2013. Study of ICT skills among the teacher-educators of Madhya Pradesh Paper presented in the national seminar on *Issues and Challenges in Teacher Education*, Bhagwan Mahaveer College of Education, Haryana, 1 March.
- Arya, Ratnamala. 2015. Inclusive education: Its relevance in present scenario. Keynote address in a national seminar on *Inclusive Education*, Ram Manohar Lohia College of Education, Bhopal, 13-14 April.



- Garg, Ashwani. 2014. Improving learning outcomes in mathematics – Some practical pragmatic strategies. Paper presented in the national seminar on *Quality in Elementary Education: Achievement and Challenges*, State Institute of Educational Management and Training, U.P. Allahabad, 18-19 February.
- Garg, Ashwani. 2014. Quality education: Teaching mathematics with pragmatic strategies. Paper presented in the national meet on *Mathematics Education*, RIE, Bhopal, 21-23 December.
- Garg, Ashwani. 2014. Saanjhi Shahadat aur Saanjhi Virasat mein ganit ki bhumika. Paper presented in the national seminar on *Saanjhi Shahadat aur Saanjhi Virasat*, RIE Bhopal, 28-29 March.
- Haque, Rizvanul. 2015. 1990 ke bad Hindustani cinema ki zuban Urdu Hindi ke tanazur mein: Urdu-Hindi sahitya ke sandarbh mein. Paper presented in the national seminar on *Saanjhi Shahadat aur Saanjhi Virasat*, RIE, Bhopal, 28-29 March.
- Pandagale, Sanjay, K. 2015. Web 2.0 technologies – An innovative teaching Method. Paper presented in the national seminar on *Emerging Frontiers of Educational Technologies*, Centre for Human Resource Development, Bangalore, 4 March.
- Pandagale, Sanjay, K. 2015. Sahitya ke virasat me kabir ka sajha yogdan. Paper presented in national seminar on *Saanjhi Shahadat aur Saanjhi Virasat*, RIE Bhopal, 28-29, March.
- Pandagale, Sanjay, K. 2015. Emerging trends in technical and vocational education and training: Vision 2025. Paper presented in international seminar on *Emerging Trends in Technical and Vocational Education and Training*, PSSCIVE, Bhopal, 18-20 February.
- Prajapati, R.P. 2014. Sustainable development through environment education. Paper presented in the national seminar on *Role of Education in Sustainable Management, Natural Resources Issue and Challenges*. Sant Hirdaram College, Bhopal, 13-14 February.
- Prajapati, R.P. 2014. Industrial environmental pollution. Paper presented in the national seminar on *MACES-2014*. JNCTS, Bhopal, 7-8 February.
- Prajapati, R.P. 2014. Modern trends for minimisation of environmental pollution. Paper presented in the national seminar on *Innovations in Science and Technology for Inclusive Development*. MPCOST, Bhopal, 26-29 March.
- Prajapati, R.P. 2014. Integration of ICT in teaching and learning process in content of science. Paper presented in the national seminar on *Importance of ICT in Contemporary Teacher Education*, Anand Institute of Management, Bhopal, 26- 27 April.
- Prajapati, R.P. 2015. Global climate change and environment. Paper presented in the national seminar on *Drinking Water Management and Climate Changes in India*. Department of Chemistry, Millennium Institute of Technology and Science, Bhopal, 25-26 March.
- Prajapati, R.P. 2015. Impact of hydrogen sulphide on environment. Paper presented in the national seminar on *Recent Trends in Science and Technology*, ISCA and MPCOST, MPCOST Bhopal, 30-31 March.

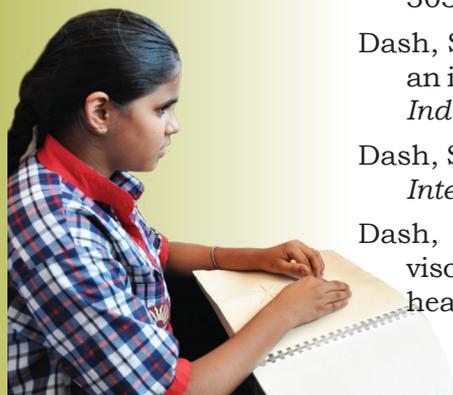


- Singh, Chitra. 2015. Towards science education for sustainable development. Paper presented in the regional meet on *Science Education*, RIE, Bhopal, 28 February.
- Singh, Chitra. 2015. Saanjhi Virasat ka muslim paripakshya. Paper presented in the national seminar on *Saanjhi Shahadat aur Saanjhi Virasat*, RIE, Bhopal, 28-29 March.
- Sharma, R. 2014. An environmental-friendly way for enhancing chemistry practical skills: The micro-scale chemistry laboratory, paper presented in the national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation*, NERIE, Shillong, 15-16 October.
- Sharma, R. 2015. Interlinking high school science with environment: Some pedagogical connections. Paper presented in regional meet on *Science Education*, RIE, Bhopal, 28, February.
- Sharma, R. 2015. Interfaces of mathematical skills with chemistry: An analysis of content at higher secondary level. Paper presented in the national meet on *Mathematics Education*, RIE, Bhopal, 21-23 December.

## REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

### Research Papers/Articles

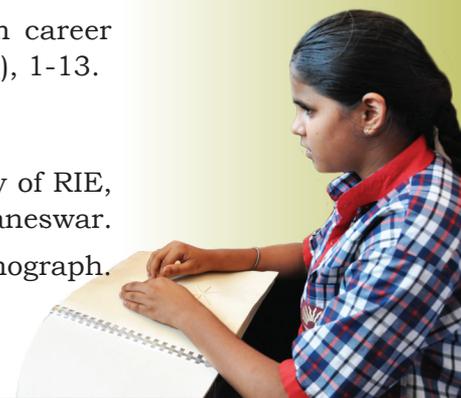
- Behera, L. and Nayak, B. 2014. Challenges and practices of inclusive education: Review of researches in last two decades. *PRANGNYA: Journal of Social Science*, 5 (2), 16-28.
- Behera, L. and Kumari, P. 2014. Status of early childhood care and education under ICDS: A study in Korha Block of Bihar. *Himalayan Journal of Social Science*, 4 (2), 30-40.
- Bharati, P. and Mohalik, R. 2014. Pedagogical content knowledge of science teachers at secondary school level. *The Ravenshaw Journal of Educational Studies*, 3 (1 and 2), 111-120.
- Dash, R. 2014. Introducing financial literacy in economics curriculum in schools. *Journal of Education in Emerging Indian Society*, (1) 1. 162-170.
- Dash, R. 2014. Argumentation and explanation in social sciences. *Journal of Education Today*, VI (1), 73-84.
- Dash, R. 2015. Myth and realities of inclusive growth in India and China. *International Journal of Humanities and Social Studies*, V.3 (1), 196-200.
- Dash, S.K. 2014. Viscometric, volumetric, and acoustic properties of binary mixture of a nuclear extractants with monocarboxylic acids (C1-C2) at 303.15 K. *Indian Journal of Pure and Applied Physics (CSIR)*, 52, 24-29.
- Dash, S.K. 2014. Unsteady free convection flow of a non-Newtonian fluid past an impulsively started porous wall with heat and mass transfer. *Acta Ciencia Indica*. XLP; 2, 69-75.
- Dash, S.K. 2014. Analysis of thermal properties of luffa cylindrica composites. *International Journal of Fibre and Textile Research*, 3(1), 13-17.
- Dash, S.K. 2014. Heat and mass transfer effects of free convection flow of visco-elastic fluid inside a porous vertical channel with constant suction and heat sources including chemical reaction. *Acta Ciencia Indica XLP*, 1, 1-11.



- Dash, S.K. 2014. H-bonded non-linear interaction of a nuclear extractant with alkanols (C1, C2) : Ultrasonic Study. *Orissa Journal of Physics*, 21 (1), 23-31.
- Dash, S.K. 2014. Characterisation and dielectric properties of barium zirconium titanate prepared by solid state reaction and high energy ball milling process. *Indian Journal of Physics (Springer)*, 88 (2), 129-135.
- Dash, S.K. 2014. A comparative study of experimental and theoretical values of ultrasonic velocity in binary mixtures of two nuclear extractants. *Journal of Pure and Applied Ultrasonics*, 36, 60-64.
- Mohalik, R. 2014. Attitude of two-year B.Ed. trainees towards internship in teaching programme. *The Education Today*, 5 (1), 146-153.
- Mohalik, R. 2014. Effectiveness of cooperative teaching on achievement in English at elementary level. *The Sikshachintan*, 8: 9-17.
- Panda, B.K. 2014. Language: The thoughts of Gopabandhu Das (Odia). *The Samaja*, 86 (1), 78-80.
- Panda, B.N. 2014. Status of CCE at elementary stage, *J. of All India Association for Educational Research*, 26 (1), 9-27.
- Panda, B.N. 2015. Impact of constructivist approach on learners' achievement in language and social sciences. *Social Vision*, 2 (1), 117-126.
- Panda, B.K. 2014. Sitakanta– The poet of the home and the world (Odia). *Jhankara*, 66(4), 443-446.
- Panda, B.K. 2014. The poetic justice and the social justice (Odia). *Istahar*, 131 (1), 113-116.
- Panda, B.K. 2014. The present and future of classical Odia language. *Jhankar*, 66 (9), 859-863.
- Panda, B.K. 2014. The classical Odia: The language and the script. *Konark*, 176 (3), 50-54.
- Ramulu, A. 2014. Protoplast isolation from leaf explants of solanum surattense burm. F.A. medically important plant. *International Journal of Engineering and Technological Research (IJETR)*, 2(10), 22-25.
- Ramulu, A. 2015. Induced glyphosate resistance in soyabean cell-suspension cultures. Proceeding of National Seminar on *Recent trends in Plant Sciences: International E-publication*. Indore, 149-156.
- Ramulu, A. 2015. Enhancement of student learning in biology using constructivism. *Edutracks*, 14, 20-22.
- Sahoo, B.N. and Mohalik, R. 2014. Impact of career guidance on career awareness of students at secondary level. *Shodha Samiksha*. 4 (1), 1-13.

### **Books**

- Mohapatra, A.K., Biswas, T. and Parida, S.P. 2014. Spider diversity of RIE, Bhubaneswar Campus – A monograph. Bhubaneswar: RIE, Bhubaneswar.
- Mohapatra, A.K., Tiwari, C. S. 2014. Journey of microscope – A Monograph. Bhubaneswar: RIE, Bhubaneswar.



**Book Chapters**

- Gowramma, I.P. 2015. Arithmetic difficulties of children with hearing impairment. In Chinn, S (Ed.), *Routledge International Handbook: Mathematics Learning Difficulties and Dyscalculia*, (125-145).UK: Routledge Publishers.
- Roy, R. and Mohalik, R. 2015. Academic leadership in school education. In Panigrahi, Manas Ranjan (Ed.), *Educational Leadership and Management*. (155-165). Renu Publishers, New Delhi.

**Paper Presentations**

- Dash, R. 2014. Learning economics in schools– A dynamic curriculum for empowerment of children. Paper presented in the national seminar on *Economics Curriculum in Schools*. NCERT, New Delhi, 25-26 February.
- Gowramma, I.P. 2014. Teacher development programmes to reach children with disabilities in India in the context of inclusive education. Paper presented in the *37th Annual Conference, Teacher Education Division of the Council for Exceptional Children (TED – CEC)*. Indianapolis, USA, 4-8 November.
- Panda, B.K. 2014. Kunjabihari and his poetic world. Paper presented in the national seminar on *Literacy contribution of Kunjabihari Das*. Sahitya Academy, Cuttack, 15 November.
- Panda, B.K. 2014. Gopinatha's discovery of Sarala Das: A controversy in history of Odia literature. Paper presented in the national seminar on *Gopinath Mohanty: The Man and His Creations*. Sahitya Academy, New Delhi, 1-2 February.
- Ramulu, A. 2014. Transformation of anti-fungal B, 1-3 glucamase gene using Agrobacterium mediated cotyledonary cultures of glycine max (L.). Paper presented in the *International Conference on Emerging Trends in Biotechnology (ICETB-2014)*. JNU Campus, 6-9 November.
- Ramulu, A. 2015. Tissue culture and biotechnological aspects in food legumes. Paper presented in the national conference on *Emerging Research Trends in Plant Sciences in 21st century*. Department of Botany, Kakatiya University, Warangal (T.S), 12-13 February.
- Ramulu, A. 2015. Glyphosate selection for alfalfa cell suspension culture. Paper presented in the national conference on *Biodiversity and Ecological Sustainability*. SCS(Y) College, Puri, Odisha. 15-16 February.

**REGIONAL INSTITUTE OF EDUCATION, MYSORE****Research Papers/Articles**

- Kumar, Anil K. and Sunny, T.R. 2014. Scaffolding: A technique of effective teaching. *Education at the Crossroads*. 3 (1), 89-90.
- Kumar, Anil K. and Sunny, T.R. 2014. Significance of student's evaluation in teacher ratings. *Thoughts on Education*, 3 (1), 157-159.
- Viswanathappa. G. and Angel, Rathnabai. 2014. ICT mediated constructivist approach in learning mathematics. *Journal of Guidance and Research*. 31(1), 367-381



Viswanathappa. G. 2014. Criterion referenced and norm referenced evaluation. *Journal of Pedagogics*. VII (1), 68-71.

### **Books**

Viswanathappa. G. 2014. *Methods of teaching mathematics*. Neelkamal Publications, Hyderabad.

Viswanathappa. G. 2014. *Assessment of learning*. Neelkamal Publications, Hyderabad.

Viswanathappa. G. 2014. *Foundations of education*. Neelkamal Publications, Hyderabad.

### **Paper Presentations**

Harinath, P.R. 2014. Bhavuka Chakravarthy Annamayya. Paper presented in the national seminar on *Annamacharya at Sri Padmavathy Womens*. UG and PG College, Tirupati, 11 September.

Harinath, P.R. 2014. Kannada Telugu tholi vyakaranalu. Paper presented in national seminar on *Lakshana Grandhalu oka Parisheelana*. Central University of Hyderabad, Hyderabad, Sri Venkateswara University, Tirupati, 10-11 November.

Harinath, P.R. 2014. Telugu lo Alakshitha Bhakthi Sahithyam. Paper presented in the national seminar on *Dakshina Bharathada Bhakthi Parampare matthu Dasa sahithya Rashtriya Vicharana Sankirana*. Kannada University, Hampi, Mumbai, 24-25 January.

Kumar, Anil K. 2014. Globalisation and teacher education: Methodologies and strategies. Chaired the session in the national seminar on *Globalisation and Teacher Education: Methodologies and Strategies*. The School of Pedagogical Sciences of Kannur University, Kerala, 1 September.

Kumar, Anil K. 2014. Counsellor education programme: The experience of RIE, Mysore. Paper presented in the regional seminar on *Current Practices in School Guidance Programme*. RIE, Mysore, 9-10 October.

## **NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM (SHILLONG)**

### **Research Papers/Articles**

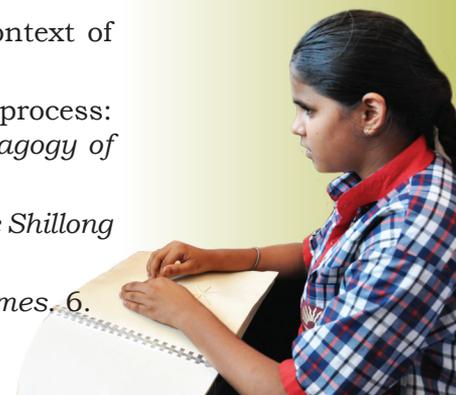
Ali, M.M. 2015. Connectivist Approach of learning with ICT, Proceedings of the International Education Conference-2015 on *Learning Technologies in Education*. Jamia Millia Islamia, New Delhi, 24-25 February 2015.

Dey, Tulika. 2014, Folk songs as a tool for teaching EVS in the context of Assam. *The Primary Teacher*. XXXVIII (2), 58-66.

Dkhar, F.G. and Newmei, T. 2015. Creating a meaningful learning process: A constructivist framework and strategies for the teachers. *Pedagogy of Learning*. 1 (1), 38-45.

Dkhar, F.G. 2014 (May 28). Education : An urgent need for change. *The Shillong Times*. 6.

Dkhar, F.G. 2014 (June 5). Shillong raise your voice. *The Shillong Times*. 6.



- Kumar, Abhay, et.al. 2014. Examination of lead concentrations in new decorative enamel paints in four countries with different histories of activity in lead paint regulation, *Environmental Research*. 132, 233–243.
- Kumar, Abhay., Kumar, Pawan. and Yadav, Sudesh. 2014. Sources and processes governing rainwater chemistry in New Delhi, India, *Natural Hazards*. 74 (3), 2147-2162.
- Pradhan, N. 2014. Student assessment in social sciences at elementary school stage: Alternative strategies. *Pedagogy of Learning*. 2 (1), 1-11.
- Pradhan, N. 2014. Education of Scheduled Tribe children: Issues and concerns. *The Ravenshaw Journal of Educational Studies*. 3 (1and2), 17-32.
- Sharma, B.U.K. 2015. Insecurity in schooling for students with special needs in North-East India: Issues and Challenges. *Compendium*. Naorem Birahari College, Manipur, 74-81.

### **Book**

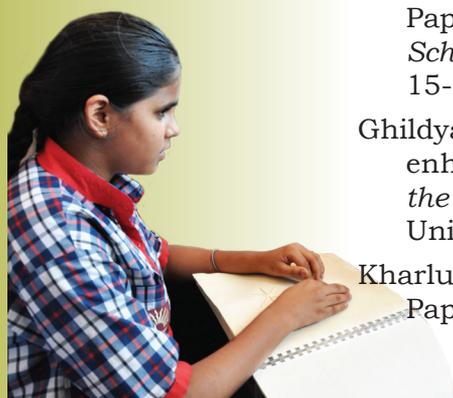
- Wallang, Melissa G. 2014. *Introduction to Sign Language: A Visual Dictionary*. Lakshi Publication, New Delhi.

### **Book Chapters**

- Bhattacharjee, D.S., Bhattacharjee V. and Dey, Tulika. 2014. Right to Education Act, 2009 and children of marginalised groups – An ethnographic study in Assam. In Hazarika, Sujata Dutta., and Garg, Saurabh (Eds.), *Livelihood and Resource Utilisation in North-East India: Participating in the global discourse of sustainability*. Anwasha Publications, Assam.
- Pradhan, N. 2014. What life skills education is for school curriculum? In P. L. Mahapatra., and P. K. Mishra (Eds.), *Life Skills Education: Need and Importance (pp. 5-20)*. Harkamaya College of Education, Gangtok.

### **Paper Presentations**

- Dey, Tulika. 2014. Realising environmental education through art integration. Paper presented in a national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation*. North-Eastern Council, Shillong, 16 October.
- Devi, Ch. Sarajubala. 2015. Conflict and educational scenario in Manipur. Presented a paper in ICSSR sponsored national seminar on *Death Anxiety amongst Students in Conflict Region in India*. Naorem Birahari College, Khundrakpam, Manipur; 9-10 February.
- Ghildyal, P. and R. Dwivedi. 2014. Aligning learning outcomes to culture. Paper presented in the national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation*. NEC, Shillong, 15-16 October.
- Ghildyal, P. 2014. The constructive role of value education in schools for enhancing juvenile propriety. Paper presented in seminar on *Back to the Roots: Revisiting Value Education for Productive Life*. William Carey University, Shillong. 18-19 November.
- Kharlukhi, B. 2014. Adolescence Education Programme: its effectiveness. Paper presented in the national seminar on *Improving Learning Outcomes*



- at School Level: Issues in Policy Planning and Implementation.* North-East Regional Institute of Education (NERIE) in collaboration with North Eastern Council (NEC), Shillong, 15-16 October.
- Pradhan, N. 2014. What life skills education is form school curriculum? Keynote address in the national seminar on *Life Skills Education.* Harkamaya College of Education, Gangtok, 30-31 July.
- Pradhan, N. 2015. Issues and challenges of education in tribal areas, Keynote address in the national seminar on *Issues and Challenges of Education in Tribal Areas.* Council of Analytical Tribal Studies (COATS), Koraput, Odisha, 19 January.
- Roy, Subhas Chandra. 2014. Role of stakeholders in improving student learning. Chaired a session in the national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation,* NERIE in collaboration with NEC, Shillong, 15-16 October.
- Sharma B.U. 2015. Insecurity in schooling for students with special needs in North- East India: Issues and challenges. Paper presented in the national seminar on *Death Anxiety amongst Students in Conflict Region in India,* Naorem Birahari College, Manipur, 9-10, February.
- Wallang, Melissa G. 2014. Presentation on status of learning of deaf students within elementary education: The status of sign language in the country, training and usage. Presented a paper in the national convention on *Inclusive Education of Children with Special Needs.* 23 September.
- Wallang, Melissa G. 2014. Issues in quality education and learning outcomes for the deaf. Presented a paper in the national seminar on *Improving Learning Outcomes at School Level: Issues in Policy Planning and Implementation.* NEC, Shillong, 15-16 October.
- Wallang, Melissa G. and Mamta Kumari. 2014. Linguistic investigation of the emerging forms in Indian sign language. Presented a paper in the *36th International Conference of the Linguistic Society of India.* Dept. of Linguistics, University of Kerala, 1-4 December.



### Ph.D. Degrees Awarded during the Year under the Supervision of NCERT Faculty

S. No.	Title of the Thesis	Name of the Student	Name of the Supervisor	Constituent Unit of NCERT	Name of the Institute/ University	Year
1.	Effect of Dichloracetate on the Nervous System of Male Rats	Mrs Priyanka Ahirwar	Prof V. K. Kakaria	RIE, Ajmer	Barkatullah University, Bhopal	2014
2.	<i>Prathamik Shalaon Mein Shikshakon Mein Dabav, Shaktihas Tatha Kritiya Santushti Mein Shaley Sanskriti Ki Bhumika Ka Adhyayan</i>	Smt Preeti Jain	Dr Ramakar Raizada	RIE, Bhopal	Barkatullah University, Bhopal	2014
3.	Comparative Study of Teacher Effectiveness, Emotional, Intelligence and Teaching Aptitude of Secondary School Teachers Working in Government and Non-government School	Mrs Meenakshi Gautam	Prof K. K. Khare	RIE, Bhopal	Barkatullah University, Bhopal	2014
4.	Effectiveness of Instructional Strategy and Value Analysis Model for Achievement in Peace Education	Mrs Ekta Choudhary	Dr Ratnamala Arya	RIE, Bhopal	Barkatullah University, Bhopal	2014
5.	Morpho Synthesis and Characterisation of Composites using Luffa Cylindrica : A Common Tropical Fruit of Orissa	Sh Chhatrapati Parida	Dr S. K. Dash	RIE, Bhubaneswar	Utkal University, Bhubaneswar	2014

6.	Experiences and Perception of Secondary Level Pre-service Student Teachers on Internship in Teaching	Ms Islam Rubia	Dr L. D. Behera	RIE, Bhubaneswar	Utkal University, Bhubaneswar	2014
7.	Social skills, achievement motivation and self-concept as the predictors of academic achievement among secondary school tribal students of low literate tribal district	Ms Indira Ramani Janapati	Dr G. Viswanathappa	RIE, Mysore	University of Mysore, Mysore	2014
8.	Effectiveness of ICT Infused Instructional Design (IID) in methodology of teaching mathematics at secondary level	Ms S. Angel Rathnabai	Dr G. Viswanathappa	RIE, Mysore	University of Mysore, Mysore	2014
9.	Effect of Music Based Language Teaching (MBLT) strategy on Language Competencies among Primary School Children	Ms Gayathri	Prof Premlata Sharma	RIE, Mysore	University of Mysore, Mysore	2014
10.	Life Centred Learner Carrier Education for Students with Mental Retardation in Karnataka State – An Exploratory Study	Ms C. Vanitha	Prof Ramaa	RIE, Mysore	University of Mysore, Mysore	2014
11.	Effect of Semantic Mapping on Reading Comprehension and Written Expression in English among Secondary School Students	Mr Nijjesh	Dr Anil Kumar	RIE, Mysore	University of Mysore, Mysore	2015



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12.	Influence of Emotional Intelligence, Mental Health and Academic Achievement of Secondary School Students in District Ananthanag of Jammu and Kashmir	Mr Sheeraz Ahmad Rathar	Prof U. Lakshmi Narayana	RIE, Mysore	University of Mysore, Mysore	2015
13.	Emotional Intelligence, Creativity and School Adjustment as Factors Influencing Academic Achievement of Secondary School Students of North Kerala	Mrs Babitha Ann Joseph	Dr Anil Kumar	RIE, Mysore	University of Mysore, Mysore	2015
14.	Effect of Discourse Oriented Pedagogy on Acquisition of English Language Skills among Upper Primary Students of Kerala	Mr Subi K. Balakrishna	Dr Anil Kumar	RIE, Mysore	University of Mysore, Mysore	2015
15.	Cluster Approach – A Strategy Model for Handloom Industries in Kerala	Bindu V. V.	Dr Ashita Raveendran	NIE, Delhi	Kannur University, Kerala	2014

## Awards and Fellowships

### A) NCERT DOCTORAL FELLOWSHIPS

S. No.	Name and Address of the Fellow	Title of the Study
1.	Mr Kandharaja K.M.C. University of Hyderabad, Hyderabad	Critical Classroom Discourse Analysis: A Study of Indian English Classrooms
2.	Ms Meenal Arora Jamia Millia Islamia, New Delhi	An Appraisal of Environmental Education in Teacher Education Programme for Furthering Sustainable Development
3.	Ms A. Neemi Devi Assam Agricultural University, Jorhat	Pre-adolescent Attachment and Peer Pressure on Adolescent Mental Health

### B) AWARDEES OF ALL INDIA COMPETITION ON INNOVATIVE PRACTICES AND EXPERIMENTS IN EDUCATION FOR SCHOOLS AND TEACHER EDUCATION INSTITUTIONS

#### List of Awarded Schools/Institutions 2014-15

S. No.	Topic/Title	Name of Schools/ Teacher Education Institutions	Name and Designation of Team Leader and Project Coordinator
1.	Stress to Wellness	Kerala Samajam Model School, Sakchi Jamshedpur-831001 Jharkhand	i) Mrs Nandni Shukla Principal and Team Leader ii) Ms Abha Viswakarma Sr. Sec. Teacher and Project Co-ordinator
2.	Promoting Inclusive Classroom Practices Among Student-teachers in the Initial Teacher Education Programme through Innovative Activities	District Institute of Education and Training (DIET), Old Town Keonjhar, Dist. Keonjhar-758002 Odisha	i) Sh Tapas Kumar Nayak Sr. Teacher Educator and Team Leader ii) Sri Vivekananda Naik Teacher-Educator and Project Co-ordinator
3.	बाल मनोशक्तियों का विकास करना	राजकीय माध्यमिक विद्यालय, आच्छापुर, पोस्टदकहामिरवास, व्हायांदकसादूलपुर, तहसीलंदकराजगढ़, जिलांदकचुरु, राजस्थान-331305	i) प्राचार्य एवं टीम लीडर ii) श्री विजय कुमार आर्य वरिष्ठ अध्यापक एवं परियोजना समन्वयक



4.	Decoding Maths	D.A.V. Public School, Pushpanjali Enclave, Outer Ring Road, Delhi- 110 034 Ph. 011-27018261, 27010377	i) Mrs Rashmi Raj Biswal, Principal and Team Leader ii) Mrs Seema Behl Project Co-ordinator
5.	Innovative Strategy for Teaching NCERT History Textbook (Themes in world History) at 10+1 Level	Govt. Model Senior Secondary School, Sector 32-C, Chandigarh-160 031	i) Mr Darshanjit Singh, Principal and Team Leader ii) Mr Arun Kumar Sharma Lecture in History and Project Co-ordinator
6.	Integrated English for Tribes : An Evolving method of English Language Acquisition	District Centre for English Govt. B.H.S.S.Campus, Neyyattinkara Thiruvananthapuram	i) Dr B. Sreejith Chief Editor and Team Leader ii) Mr Manoj C. Project Co-ordinator
7.	Designing and Implementing a Blended Teaching Learning Programme for Improving Pedagogical Practices in Classrooms	School of Education, Pondicherry University, Pondicherry- 605 014	i) Prof M. S. Lalithamma Head and Dean and Team Leader ii) Dr Sreekala E. Assistant Professor and Project Co-ordinator

### C) AWARDEES OF NATIONAL ICT AWARD FOR SCHOOL TEACHERS

S.No.	Name and Address
1.	Shri Sandeep Primary Teacher Govt. Primary School, Daya, Distt. – Hisar, Haryana-125001
2.	Shri Naveen Gautam Lecturer (Biology) Govt. Senior Secondary School, Mundkhar, Teh. – Bhoranj Distt. – Hamirpur, Himachal Pradesh-176044
3.	Shri Shambulingaiah K. Assistant Teacher Govt. Higher Primary School, Jodikothapally, Srinivasapura Taluk Distt. – Kolar, Karnataka- 563135
4.	Shri Manohar Lal Rai Headmaster Govt. Middle School, Mahalaxmi (Fort Campus), Distt. – Shajapur Madhya Pradesh- 465001
5.	Shri N. Anbazhagan Teacher (Science) Panchayat Union Middle School, 1-3 Ward Uthiramerur Union Distt. – Kancheepuram, Tamil Nadu- 603406



6.	Shri Parambir Singh Trained Graduate Teacher (Social Studies) Rajiv Gandhi Navodaya Vidyalaya, Nanoorkhera, Nalapani, P.O. Raipur Distt. – Dehradun, Uttarakhand– 248008
7.	Shri Manodhar Kumar Nainwal Assistant Teacher Govt. Primary School, Kaljikkhal, Distt. – Pauri (Garhwal) Uttarakhand– 246113
8.	Smt Manu Gulati Trained Graduate Teacher (English) Sarvodaya Kanya Vidyalaya No. 2, Punjabi Bagh, New Delhi – 110026
9.	Shri Sanjeev Sharma Post Graduate Teacher (Computer Science) Kendriya Vidyalaya, Holta Camp, Palampur, Distt. – Kangra Himachal Pradesh – 176061

#### **D) AWARDEES OF NCERT AWARDS FOR EXCELLENCE IN VOCATIONAL EDUCATION**

<b><i>Award Category – Best Vocational Teacher</i></b>	
<b>Western Region</b>	
1.	Mrs Jovita Pereira Dcosta Damodar Higher Secondary School, Gudi Paroda, Quepem, Goa
2.	Khandalwad Vishwambar Dashrath Govt. Technical High School Centre, Parbhani (Maharashtra)
<b>Southern Region</b>	
3.	Jothikumar G.S. Victory VHSS, Olathanni Neyyattinkara, P.O. Thiruvanthapuram, Kerala
4.	Deiveehan S Sri Maramman Higher Secondary School, Samayapuram, Tamil Nadu
5.	M. Esakkimuthu Govt. Higher Secondary School, Samyanallur, Madhurai Dist. Tamil Nadu
6.	C. Vairavan Govt. Higher Secondary School, Dist. Vellalur, Tamil Nadu
7.	R.S. Murlidharan TVS Higher Secondary School, Lakshmipuram, Madhurai, Tamil Nadu
8.	Jeyprakash Narayanan T GHSS, M. Chatrapatty, Madhurai Dist. Tamil Nadu
<b><i>Award Category – Best Student Project</i></b>	
<b>Southern Region</b>	
9.	Shri Gokul J.S Victory VHSS, Olathanni Neyyattinkara, P.O. Thiruvanthapuram, Kerala



<b>Award Category – Best Institution Award</b>	
<b>Southern Region</b>	
10.	Shri P. Perumal General Cariappa Higher Secondary School No. 1 Kmarajar Street Dasarathapuram, Saligramam, Chennai
<b>Award Category – Best Vocational Teacher</b>	
<b>Northern Region</b>	
11.	Bimal Kumar Gupta Govt. Model Senior Secondary School, Sector 32 C, Chandigarh
12.	Subhash Chandra Bhatia Govt. Secondary School (G), Mahnasingh Road, Amritsar, Punjab
<b>Eastern Region</b>	
13.	Ms Nibedita Panda Govt. Vocational Junior College, AT: V.B. Mahavidhyalaya, Dist. Chandikhol, Odisha
14.	Shri Brahmananda Das Govt. Vocational Junior College, AT: V.N. Collage, Jajpur Road, Odisha
15.	Mangulia Send Govt. Vocational Junior College, Dura Dist, Sanjam, Odisha
16.	Prakash Kumar Nayak Govt. Vocational Junior College, Mahimunda, Balangir, Odisha
<b>North-Eastern Region</b>	
17.	Mridul Kanti Roy Abhoyaswori H.S. and M.P. School, Abhoyapuri (Assam)
<b>Award Category – Best Institution Award</b>	
<b>Eastern Region</b>	
18.	Prof Upendra Nath Mohanty Govt. Vocational Junior College, At S.C.S. JR, College, Puri, Odisha
<b>Award Category – Best School Industry Linkage Award</b>	
<b>Northern Region</b>	
19.	Vinit Gupta Govt. Girls Sr. Sec. School, No. 1, Tagore Garden, New Delhi-27
<b>Award Category – Best Vocational Teacher</b>	
<b>Western Region</b>	
20.	Vulchi Sivaprasad Swami Vivekanand Junior College (MCVC), 78, Sindhi Society Chembur, Mumbai
<b>Southern Region</b>	
21.	Mee R. Nair APPMVHSS, Avaneeswaram Kunicode, P.O., Kollam (Dist). Kerala



<b>Northern Region</b>	
22.	Daizy Sabharwal Govt. Sarvodaya Kanya Vidhyalaya, B-3 Paschim Vihar, New Delhi
<b>Award Category – Best Student Project</b>	
<b>Southern Region</b>	
23.	P. Thirumurugavel General Cariappa Higher Secondary School No. 1, Kmarajar Street Dasarathapuram, Saligramam, Chennai
<b>Northern Region</b>	
24.	Jishan Ali SHKSBV No. 1 Lajpat Nagar, Ring Road, New Delhi-24
<b>Award Category – Best Institution Award</b>	
<b>Western Region</b>	
25.	Dr Uday C. Gaunker Damodar Higher Secondary School, Gudi Paroda, Quepem, Goa
<b>Southern Region</b>	
26.	Shri K.G. Ashok Kumar Sivavilasom Vocational Higher Secondary School, Thamarakuddy P.O. Kottarakara, Kollam, Kerala
<b>Award Category – Best School Industry Linkage Award</b>	
<b>Southern Region</b>	
27.	Shri P. Perumal General Cariappa Higher Secondary School No. 1, Kmarajar Street Dasarathapuram, Saligramam, Chennai, Tamil Nadu



**Details of NCERT Committees, as mentioned in MoA,  
for the year 2014-15**

- ❑ General Council
- ❑ Executive Committee
- ❑ Finance Committee
- ❑ Establishment Committee
- ❑ Building and Works Committee
- ❑ Programme Advisory Committee
- ❑ Educational Research and Innovations Committee
- ❑ Academic Committee of NIE
- ❑ Managing Committee of RIE, Ajmer
- ❑ Managing Committee of RIE, Bhopal
- ❑ Managing Committee of RIE, Bhubaneswar
- ❑ Managing Committee of RIE, Mysore
- ❑ Managing Committee of NERIE, Umiam (Shillong)

NCERT



## GENERAL COUNCIL

- |  |   |
|--|---|
| (i) The Minister of Human Resource Development President (ex-officio)                                  | 1. (i) Dr M.M. Pallam Raju<br>Union Minister for Human Resource Development<br>Ministry of Human Resource Development, Shastri Bhawan<br>New Delhi - 110001<br><b>(up to 26.05.2014)</b>              |
|  | (ii) Smt Smriti Zubin Irani<br>Union Minister for Human Resource Development<br>Ministry of Human Resource Development, Shastri Bhawan<br>New Delhi - 110001<br><b>(from 27.05.2014)</b>              |
| (ii) Chairman of the University Grants Commission (ex-officio)   | 2. Chairman<br>University Grants Commission<br>Bahadur Shah Zafar Marg<br>New Delhi-110002  |
| (iii) Secretary to the Ministry of Human Resource Development (Department of Education) (ex-officio)   | 3. (i) Shri R. Bhattacharya<br>Secretary<br>Department of School Education and Literacy<br>Ministry of HRD<br>Government of India<br>Shastri Bhawan<br>New Delhi-110 001<br><b>(up to 31.12.2014)</b> |
|  | (ii) Ms Vrinda Sarup<br>Secretary<br>Department of School Education and Literacy<br>Ministry of HRD<br>Government of India<br>Shastri Bhawan<br>New Delhi-110 001<br><b>(from 01.01.2015)</b>         |
| (iv) Four Vice-Chancellors of Universities, one from each region, nominated by the Government of India | 4. Professor G. C. Tripathi<br>Vice-Chancellor<br>Banaras Hindu University (BHU)<br>Varanasi (U. P.)<br><b>(from 10.12.2014)</b>  |
|  | 5. Professor H. Nandkumar Sarma<br>Vice-Chancellor<br>Manipur University<br>Imphal<br><b>(from 10.12.2014)</b>  |



(v) One representative of each State Government and Union Territory with a legislature who shall be the Education Minister of the State/Union Territory (or his representative) and in the case of Delhi, the Chief Executive Councillor, Delhi (or his representative)

6. Professor (Dr) M.M. Salunkhe  
Vice-Chancellor  
Central University of Rajasthan  
NH-8, Bandar Sindri  
Tehshil – Kishangarh  
Dist. Ajmer-305801  
Rajasthan
7. Professor B.P. Sanjay  
Vice-Chancellor  
Central University of Tamil Nadu  
Thanjavur Road  
Thiruvarur-610004  
Tamil Nadu
8. Minister for School Education  
Government of Andhra Pradesh  
A.P. Secretariat Building  
Hyderabad-500 022
9. Minister for School Education  
Government of Arunachal Pradesh  
Itanagar - 791111
10. Minister for School Education  
Government of Assam  
Janata Bhawan, Dispur, Assam
11. Minister for School Education  
Government of Bihar  
New Secretariat Building  
Patna-800 015
12. Minister for School Education  
Government of Chhattisgarh  
Raipur, Chhattisgarh
13. Minister for School Education  
Government of Goa  
Goa Secretariat  
Panaji-403 001
14. Minister for School Education  
Government of Gujarat  
Block No. 1, Sachivalaya  
Gandhi Nagar-382010 (Gujarat)



15. Minister for School Education  
Government of Haryana  
Haryana Civil Secretariat  
Chandigarh-160 001
16. Minister for School Education  
Government of Himachal Pradesh  
Shimla-171 002
17. Minister for School Education  
Government of Jharkhand  
Ranchi, Jharkhand
18. Minister for School Education  
Government of Jammu and Kashmir  
Srinagar-180 001
19. Minister for School Education  
Government of Karnataka  
Vidhan Saudha  
Bengaluru-560001
20. Minister for School Education  
Government of Kerala  
Ashoka Nanthenocode  
Thiruvananthapuram - 695 001
21. Minister for School Education  
Government of Madhya Pradesh  
Bhopal -462 001
22. Minister for School Education  
Government of Maharashtra  
Mantralya Main  
Mumbai -400 032
23. Minister for School Education  
Government of Manipur  
Manipur Secretariat  
Imphal -795 001
24. Minister for School Education  
Government of Meghalaya  
Meghalaya Secretariat  
Shillong -793 001
25. Minister for School Education  
Government of Mizoram  
Aizawl -796 001





26. Minister for School Education  
Government of Nagaland  
Kohima-797 001
27. Minister for School Education  
Government of Odisha  
Odisha Secretariat  
Bhubaneswar-751001
28. Minister for School Education  
Government of Punjab  
Chandigarh-160 017
29. Minister for School Education  
Government of Rajasthan  
Government Secretariat  
Jaipur-302 001
30. Minister for School Education  
Government of Sikkim  
Sikkim Secretariat, Tashiling  
Gangtok-737 101
31. Minister for School Education  
Government of Tamil Nadu  
Fort St. Georg  
Chennai-500 009
32. Minister for School Education  
Government of Telangana  
Telangana Secretariat,  
Hyderabad
33. Minister for School Education  
Government of Tripura  
Civil Secretariat  
Agartala-799 001
34. Minister for School Education  
Government of Uttar Pradesh  
Lucknow-226 001
35. Minister for School Education  
Government of Uttarakhand  
Dehradun, Uttarakhand
36. Minister for School Education  
Government of West Bengal  
Vikas Bhawan, Salt Lake  
Kolkata-700 001

(vi) All members of the Executive Committee not included above; and

37. Minister for School Education  
Government of Puducherry  
Assembly Secretariat  
Victor Simonel Street  
Puducherry-605 001
38. Minister for School Education  
Government of National Capital  
Territory of Delhi  
Delhi Secretariat, I.P. Estate  
New Delhi
39. (i) Dr Shashi Tharoor  
Minister of State  
Department of Education  
Ministry of Human  
Resource Development  
Shastri Bhawan  
New Delhi-110001  
**(up to 26.05.2014)**
- (ii) Shri Upendra Kushwaha  
Minister of State  
Department of Education  
Ministry of Human  
Resource Development  
Shastri Bhawan  
New Delhi-110001  
**(from 11.11.2014)**
40. (i) Professor Parvin Sinclair  
Director, NCERT  
New Delhi-110016  
**(up to 20.10.2014)**
- (ii) Professor B. K. Tripathi  
Director (Additional Incharge),  
NCERT, New Delhi-110016  
**(from 21.10.2014)**
41. Smt Lata Vaidyanathan  
1601, Tower 5  
Close South Apts. Nirvana Country  
Gurgaon
42. Dr H. K. Dewan  
Vidya Bhawan Society  
Udaipur, Rajasthan-313004
43. Dr Rukimini Banerji  
Pratham/ASER  
B-4/54, Safdarjang Enclave  
New Delhi-110029





44. Professor Kiran Devendra  
I-10 Singletons  
South City II  
Gurgaon
45. Dr Vandana Sekhar  
Principal  
KV No. 2  
Kariappa Marg  
Janshi Cantt.-284001, UP
46. Ms Bertha G. Dkhar  
Programme Coordinator  
Bethany Society  
Lady Veronica Lane  
Laitumkhrach  
Shillong-793003
47. Professor B.K. Tripathi  
Joint Director, NCERT  
New Delhi-110016
48. Professor Manoj Mishra  
North-East Regional Institute  
of Education  
Umiam, Shillong  
Meghalaya-793 103
49. Professor Sridhar Srivastava  
Head, ESD  
NCERT
50. Dr Gouri Srivastava  
Head, DWS  
NCERT
51. Joint Secretary (SE-II)  
Ministry of HRD  
(Department of School  
Education and Literacy)  
Shastri Bhawan  
New Delhi-110001
52. Financial Adviser  
Ministry of HRD  
(Department of School  
Education and Literacy)  
Shastri Bhawan  
New Delhi-110001

- |   |  |
|---|--|
| (vii) Chairman  | 53. Chairman   |
| (a) Central Board of Secondary Education Delhi (ex-officio)   | Central Board of Secondary Education<br>Shiksha Kendra<br>2, Community Centre<br>Preet Vihar<br>Delhi-110092                                 |
| (b) Commissioner Kendriya Vidyalaya Sangathan, New Delhi (ex-officio)   | 54. Commissioner<br>Kendriya Vidyalaya Sangathan<br>18, Institutional Area<br>Shaheed Jeet Singh Marg<br>New Delhi-110 016                   |
| (c) Director Central Health Education Bureau New Delhi (ex-officio)   | 55. Director<br>Central Health Education Bureau (DGHS)<br>Ministry of Health and Family Welfare<br>Kotla Road, New Delhi-110002              |
| (d) Deputy Director General Incharge of Agricultural Education ICAR, Ministry of Agriculture New Delhi (ex-officio)   | 56. Deputy Director General<br>In-charge of Agriculture Education<br>ICAR<br>Krishi Anusandhan Bhawan<br>Pusa, New Delhi-110012              |
| (e) Director of Training Directorate General of Training and Employment Ministry of Labour New Delhi (ex-officio)   | 57. Director of Training<br>Directorate General of Training and Employment, Ministry of Labour<br>Sharam Shakti Bhawan<br>New Delhi - 110001 |
| (f) Representative of Education Division Planning Commission New Delhi (ex-officio)   | 58. Principal Adviser Education<br>NITI Aayog<br>Yojana Bhawan<br>New Delhi-110001   |
| (viii) Such other persons not exceeding six as the Government of India may, from time to time, nominate. Not less than four of these shall be school teachers | 59. Dr (Smt) Kamlesh Kalra<br>401, Sector-14<br>Faridabad-121007<br>Haryana  |
|   | 60. Smt Deepika Dhanda<br>47, Civil Lines<br>Jaipur-302006<br>Rajasthan  |
|   | 61. Ms Manika Sharma<br>Principal<br>Shri Ram School, D-3 Street<br>Vasant Vihar<br>New Delhi-110057   |



Special Invitee

Convenor

62. Smt Ameeta M. Wattal  
Principal  
Springdales School  
Pusha Road  
Upper Ridge Road Junction  
New Delhi-110005
63. Dr D. R. Saini  
Principal, DPS, Sector-XII  
R.K. Puram, New Delhi - 110022
64. Ms Swati Mandal  
PGT, Jawahar Navodaya Vidyalaya  
Banipur, North 24-Parganas  
West Bengal-743233
65. Secretary  
Council of Indian School  
Certificate Examination  
Pragati House, 3rd Floor  
47, Nehru Place  
New Delhi-110019
66. Ms Sudeshna Sen  
Secretary  
NCERT  
New Delhi-110016



## EXECUTIVE COMMITTEE

- (i) President of the Council who shall be the ex-officio President of the Executive Committee
1. (i) Dr M.M. Pallam Raju  
Union Minister for Human Resource Development  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110 001  
**(Up to 26.05.2014)**
- (ii) Smt Smriti Zubin Irani  
Union Minister for Human Resource Development  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110 001  
**(From 27.05.2014)**
- (ii) (a) The Minister of State in the Ministry of Education who shall be the ex-officio Vice-President of the Executive Committee
2. (i) Dr Shashi Tharoor  
Minister of State  
Department of School Education and Literacy  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110001  
**(Up to 26.05.2014)**
- (ii) Shri Upendra Kushwaha  
Minister of State  
Department of School Education and Literacy  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110001  
**(From 11.11.2014)**
- (b) A Deputy Minister of Education nominated by the President of the Council
3. \_\_\_\_\_
- (c) Director of the Council
4. (i) Professor Parvin Sinclair  
Director, NCERT  
New Delhi-110016  
**(Up to 20.10.2014)**
- (ii) Professor B. K. Tripathi  
Director (Additional Incharge)  
NCERT, New Delhi-110016  
**(From 21.10.2014)**



- (d) Secretary, Ministry of Education  
(ex-officio)
- (iii) Chairman of the University Grants Commission -  
Member ex-officio
- (iv) Six Educationists with known interest in school education (two of whom shall be school teachers) nominated by the President
5. (i) Shri R. Bhattacharya  
Secretary  
Dept. of School Education and Literacy  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110 001  
**(Up to 31.12.2014)**
- Ms Vrinda Sarup  
Secretary  
Dept. of School Education and Literacy  
Ministry of HRD  
Shastri Bhawan  
New Delhi-110 001  
**(From 01.01.2015)**
6. Chairman  
University Grants Commission  
Bahadur Shah Zafar Marg  
New Delhi-110 002
7. Smt Lata Vaidyanathan  
Principal  
Modern School  
Barakhamba Road  
New Delhi
8. Professor H. K. Dewan  
Vidya Bhawan Society  
Udaipur, Rajasthan-313004
9. Dr Rukimini Banerji  
Pratham/ASER  
B-4/54, Safdarjang Enclave  
New Delhi-110029
10. Dr Kiran Devendra  
I-10 Singletons  
South City II  
Gurgaon, Haryana
11. Dr Vandana Sekhar  
Principal  
KV No. 2, Kariappa Marg  
Jhansi Cantt., UP-284001
12. Ms Bertha G. Dkhar  
Programme Coordinator  
Bethany Society  
Lady Veronica Lane  
Laitumkhrah  
Shillong-793003



- |   |  |
|---|--|
| (v) Joint Director of the Council   | 13. Professor B.K. Tripathi<br>Joint Director<br>NCERT<br>New Delhi-110016   |
| (vi) Three members of the faculty of the Council, whom at least two shall be at the level of Professors and Heads of the Departments, nominated by the President of the Council | 14. Professor Manoj Mishra<br>North East Regional Institute of Education<br>Umiam, Shillong<br>Meghalaya-793103                        |
| (vii) One representative of the Ministry of Education; and  | 15. Professor Sridhar Srivastava<br>Head, ESD<br>NCERT   |
| (viii) One representative of the Ministry of Finance, who shall be the Financial Adviser of the Council   | 16. Professor Gouri Srivastava<br>Head, DGS<br>NCERT   |
| (ix) Secretary of the Council shall be the Secretary of the Executive Committee   | 17. Joint Secretary (SE-II),<br>Ministry of HRD<br>(Department of School Education and Literacy)<br>Shastri Bhawan<br>New Delhi-110001 |
|   | 18. Financial Adviser<br>Ministry of HRD<br>(Department of School Education and Literacy)<br>Shastri Bhawan<br>New Delhi-110001        |
|   | 19. Ms Sudeshna Sen<br>Secretary, NCERT<br>New Delhi-110016  |



## FINANCE COMMITTEE

The Director of NCERT (ex-officio)	Chairperson	(i) Professor Parvin Sinclair Director, NCERT New Delhi-110016 <b>(Up to 20.10.2014)</b>
		(ii) Professor B. K. Tripathi Director (Additional Incharge) NCERT, New Delhi-110016 <b>(From 21.10.2014)</b>
Financial Advisor MHRD	Member	Financial Adviser Ministry of HRD (Department of School Education Literacy) Shastri Bhawan, New Delhi-110001
	Member	Joint Secretary (SE-II) Ministry of HRD (Department of School Education and Literacy), Shastri Bhawan New Delhi-110001
	Member	Shri Amit Cowshish Additional Secretary (Retd.) Ministry of Defence 578, Sector 'A', Pocket 'C' Vasant Kunj New Delhi-110070
	Member	Smt Neelam Nath Former Secretary to GOI F/1104, Park View City 2 Sohna Road, Sector 49 Gurgaon
Secretary NCERT	Member- Convener	Ms Sudeshna Sen Secretary NCERT New Delhi-110016



## ESTABLISHMENT COMMITTEE

- |  |   |
|--|---|
| (i). Director of the Council<br>(ex-officio)   | 1. Professor Parvin Sinclair<br>(i) Director, NCERT<br>New Delhi-110016<br><b>(Up to 20.10.2014)</b><br><br>Professor B. K. Tripathi<br>(ii) Director (Additional Incharge)<br>NCERT, New Delhi-110016<br><b>(From 21.10.2014)</b>  |
| (ii). The Joint Director<br>NCERT (ex-officio)   | 2. Professor B. K. Tripathi<br>Joint Director<br>NCERT, New Delhi-110016  |
| (iii). A nominee of the<br>Ministry of Education<br>to be nominated by the<br>President, NCERT                   | 3. Joint Secretary (SE-II)<br>Ministry of HRD<br>(Department of School Education and Literacy)<br>Shastri Bhawan<br>New Delhi-110001<br><b>(From 13.05.2011 to 12.05.2014)</b>  |
| (iv). Four educationists to<br>be nominated by the<br>President, NCERT of<br>whom at least one is a<br>Scientist | 4. Dr Dinesh Kumar<br>Addl. Commissioner (Academic)<br>Kendriya Vidyalaya Sangathan<br>18, Institutional Area<br>Shahid Jeet Singh Marg<br>New Delhi-110016.<br><b>(from 13.05.2011 to 12.05.2014)</b><br><br>5. Professor Krishna Mohan<br>Head, Deptt. of Geography<br>Punjab University<br>Chandigarh<br><b>(from 13.05.2011 to 12.05.2014)</b><br><br>6. Shri Arun Kapur<br>Director<br>Vasant Valley School<br>Sector C<br>Vasant Kunj<br>New Delhi-110 070<br><b>(from 13.05.2011 to 12.05.2014)</b><br><br>7. Professor Chitra Natrajan<br>Dean<br>Homi Bhabha Centre for Science Education<br>Tata Institute of Fundamental Research<br>V.N. Purav Marg, Mankhand<br>Mumbai-400 088<br><b>(from 09.04.2012 to 12.05.2014)</b> |



- |         |  |     |   |
|---------|--|-----|---|
| (v).    | One representative from the Regional Institute of Education to be nominated by the President, NCERT  | 8.  | Principal<br>North-East Regional Institute of Education<br>Umiam, (Shillong)-793103<br>Meghalaya<br><b>(from 13.05.2011 to 12.05.2014)</b>      |
| (vi).   | One representative of the National Institute of Education Delhi to be nominated by the President, NCERT  | 9.  | Professor Raja Ram Sharma<br>Member Establishment Committee and<br>Joint Director, CIET<br>(NCERT)<br>Sri Aurobindo Marg<br>New Delhi - 110 016 |
| (vii).  | Two representatives, one each from the regular academic and Non-academic staff of the Council elected from amongst their category in the manner prescribed in appendix to the Regulations of the Council | 10. | Dr M.V.Srinivasan<br>(Elected representative Academic Staff)<br>DESS, NCERT<br>New Delhi - 110016<br><b>(From 20.07.2013)</b>                   |
| (viii). | Financial Adviser<br>NCERT   | 11. | Shri Parash Ram<br>(Elected representative Non-Academic Staff)<br>NCERT, New Delhi - 110016<br><b>(From 20.07.2013)</b>                         |
| (ix).   | Secretary, NCERT<br>Member-Convenor  | 12. | Financial Adviser<br>Ministry of HRD<br>(Department of School Education and Literacy)<br>Shastri Bhawan<br>New Delhi - 110 001                  |
|         |  | 13. | Ms Sudeshna Sen<br>Secretary<br>NCERT, New Delhi - 110016   |



## BUILDING AND WORKS COMMITTEE

- |   |  |
|---|--|
| 1. Director, NCERT<br>Chairman Ex-officio                       | i. Professor Parvin Sinclair<br>Director, NCERT<br>New Delhi-110016<br><b>(Up to 20.10.2014)</b><br><br>ii. Professor B.K. Tripathi<br>Director (Additional Incharge)<br>NCERT, New Delhi-110016<br><b>(From 21.10.2014)</b> |
| 2. Joint Director, NCERT<br>Vice-Chairman, Ex-officio           | Professor B.K. Tripathi<br>Joint Director,<br>NCERT, New Delhi-110016  |
| 3. Chief Engineer, CPWD<br>or his nominee (Member)              | Superintending Engineer<br>DCC XI, CPWD<br>Room No.127, 1st Floor<br>A-Wing, Pushpa Bhawan<br>Madangir, New Delhi.   |
| 4. A representative of Ministry of<br>Urban Development (Works) | Deputy Secretary (Finance)<br>Ministry of Urban Development<br>Finance Division<br>Nirman Bhawan<br>New Delhi  |
| 5. The Consulting Architect of<br>NCERT                         | Chief Architect (NDR)<br>C.P.W.D., 303, 'A' Wing<br>Nirman Bhawan, Maulana Azad Road<br>New Delhi-110011   |
| 6. Financial Adviser of the<br>Council or his nominee           | Financial Adviser<br>Ministry of HRD<br>(Department of School Education and<br>Literacy), Shastri Bhawan<br>New Delhi-110001   |
| 7. A nominee of the Ministry of<br>HRD                          | Joint Secretary (SE-II)<br>Ministry of HRD<br>(Department of School Education<br>and Literacy)<br>Shastri Bhawan<br>New Delhi-110001   |
| 8. A Civil Engineer of standing<br>(nominated by the President) | Shri Anuj Gaur<br>Executive Engineer (Civil)<br>Indian Institute of Technology<br>Hauz Khas<br>New Delhi-110016<br><b>(From 27.12.2011 to 26.12.2014)</b>  |



- |  |  |
|--|--|
| 9. An Electrical Engineer of standing (nominated by the President) | Shri G.K. Taneja<br>Executive Engineer (Elect.)<br>Th: Chairman E&W<br>Indian Institute of Technology<br>Hauz Khas<br>New Delhi-110016<br><b>(From 27.12.2011 to 26.12.2014)</b>   |
| 10. A Member of Executive Committee (nominated by the President)   | Dr R.B. Shivagunde<br>Joint Director<br>Pandit Sunderlal Sharma<br>Central Institute of Vocational Education<br>Regional Institute of Education Campus<br>Shyamla Hills, Bhopal-462013<br><b>(From 27.12.2011 to 26.12.2014)</b> |
| 11. Secretary, NCERT   | Ms Sudeshna Sen<br>Secretary<br>NCERT<br>New Delhi-110016  |



## PROGRAMME ADVISORY COMMITTEE

Director, NCERT

Chairperson

Joint Director, NCERT

Vice-Chairperson

### ***Five Professors Nominated by the President, NCERT***

- |  |        |
|--|--------|
| 1. Professor D.D. Mishra<br>Chairperson<br>Central Mining Research Institute<br>Barwa Road, Dhanbad-826001<br>Jharkhand            | Member |
| 2. Professor Vasudha Kamat<br>Vice-Chancellor<br>SNDT Women's University, 1, N. Thackersey Road<br>New Marine Lines, Mumbai-400020 | Member |
| 3. Professor D.P. Singh (Retd.)<br>Professor Emeritus,<br>IIT, Banaras Hindu University<br>Varanasi-221005 U.P.                    | Member |
| 4. Professor R.P. Tiwari<br>Vice-Chancellor<br>Dr Hari Singh Gour University<br>Sagar, Madhya Pradesh-470003                       | Member |
| 5. Professor Nand Kishor Pandey<br>Head, Deptt. of Hindi<br>University of Rajasthan<br>JLN Marg, Jaipur, Rajasthan-302004          | Member |

### ***Five Directors of SIEs/SCERTs nominated by the President, NCERT as members***

- |  |        |
|--|--------|
| 1. Director<br>State Council of Educational Research and Training<br>(SCERT)<br>Sector - 32 - C, Chandigarh Administration<br>Chandigarh | Member |
| 2. Director<br>Gujarat Council of Educational Research and Training<br>(GCERT)<br>Vidyabhawan, Sector-12<br>Gandhinagar, Gujarat         | Member |

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- |    |  |        |
|----|--|--------|
| 3. | Dr K.K. Chandini<br>Head<br>Teacher Education & HSS<br>State Council of Educational Research and Training<br>Poojapura, Thiruvanthapuram, Kerala | Member |
| 4. | Director<br>State Council of Educational Research and Training<br>(SCERT)<br>Pustak Bhawan, B-Wing, Arera Hills<br>Bhopal, Madhya Pradesh        | Member |
| 5. | Director<br>Directorate of Educational Research and Training<br>Arthuthnot Road, Nongnimmaw, Laitumkhrach<br>Shillong, Meghalaya                 | Member |

### Members from NCERT

- |    |   |        |
|----|---|--------|
| 1. | Joint Director<br>CIET, NCERT<br>New Delhi  | Member |
| 2. | Professor Amarendra Prasad Bahera<br>CIET, NCERT<br>New Delhi   | Member |
| 3. | Joint Director<br>PSSCIVE<br>Shyamla Hills<br>Bhopal-462013 (M.P.)  | Member |
| 4. | Professor Saurabh Prakash<br>PSSCIVE<br>Shyamla Hills<br>Bhopal-462013 (M.P.)                                   | Member |
| 5. | Principal<br>Regional Institute of Education<br>Capt. D.P. Choudhary Marg<br>Ajmer-305004 (Rajasthan)           | Member |
| 6. | Dean of Instruction<br>Regional Institute of Education<br>Capt. D.P. Choudhary Marg<br>Ajmer-305004 (Rajasthan) | Member |
| 7. | Principal<br>Regional Institute of Education<br>Shyamla Hills<br>Bhopal-462013 (M.P.)                           | Member |



8.	Dean of Instruction Regional Institute of Education Shyamla Hills Bhopal - 462013 (M.P.)	Member
9.	Principal Regional Institute of Education Sachivalaya Marg, Bhubaneswar - 751007 Odisha	Member
10.	Dean of Instruction Regional Institute of Education Sachivalaya Marg, Bhubaneswar-751007 Odisha	Member
11.	Principal Regional Institute of Education Manas Gangotri Mysore-570006	Member
12.	Dean of Instruction Regional Institute of Education Manas Gangotri Mysore-570006	Member
13.	Principal North-East Regional Institute of Education Umiam (Shillong) Distt. Ri-Bhoi, Meghalaya 793103	Member
14.	Professor Nityanand Pradhan North-East Regional Institute of Education, Umiam (Shillong) Distt. Ri-Bhoi, Meghalaya 793103	Member
15.	Head Department of Elementary Education (DEE) NCERT, New Delhi	Member
16.	Dr A. K. Rajput Department of Elementary Education (DEE) NCERT, New Delhi	Member
17.	Head Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
18.	Professor Sunita Farakya Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member



19.	Head Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
20.	Professor Minoo Nandrajog Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
21.	Head Department of Education in Languages (DEL) NCERT, New Delhi	Member
22.	Professor Sandhya Singh Department of Education in Languages (DEL) NCERT, New Delhi	Member
23.	Head Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
24.	Dr Jyotsna Tiwari Associate Professor Department of Education in Arts and Aesthetics NCERT, New Delhi	Member
25.	Head Department of Education of Groups with Special Needs (DEGSN) NCERT, New Delhi	Member
26.	Dr V.K. Singh Associate Professor Department of Education of Groups with Special Needs (DEGSN)	Member
27.	Head Department of Gender Studies (DGS) NCERT, New Delhi	Member
28.	Dr Anita Nuna Associate Professor Department of Gender Studies (DGS) NCERT, New Delhi	Member
29.	Head Educational Survey Division (ESD) NCERT, New Delhi	Member
30.	Dr Indrani Bhaduri Associate Professor Educational Survey Division (ESD) NCERT, New Delhi	Member



31.	Head Department of Teacher Education (DTE) NCERT, New Delhi	Member
32.	Professor Raj Rani Department of Teacher Education (DTE) NCERT, New Delhi	Member
33.	Head Department of Educational Psychology and Foundations of Education (DEPFE) NCERT, New Delhi	Member
34.	Professor Daya Pant Department of Educational Psychology and Foundations of Education (DEPFE) NCERT, New Delhi	Member
35.	Head Department of Educational Research (DER) NCERT, New Delhi	Member
36.	Dr Rajender Pal Associate Professor Department of Educational Research (DER) NCERT, New Delhi	Member
37.	Head International Relations Division (IRD) NCERT, New Delhi	Member
38.	Head Department of Educational Kits (DEK) NCERT, New Delhi	Member
39.	Head RMSA Project Cell NCERT, New Delhi	Member
40.	Professor Sharad Sinha RMSA Project Cell NCERT, New Delhi	Member
41.	Head Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
42.	Dr P.D. Subhash Asstt. Professor Planning and Monitoring Division (PMD) NCERT, New Delhi	Member



- |     |  |          |
|-----|--|----------|
| 43. | Head<br>Inclusive Education Cell<br>NCERT, New Delhi | Member   |
| 44. | Ms Sudeshna Sen<br>Secretary, NCERT                  | Convener |

### **Special Invitees**

1. Joint Secretary (School 4)  
Department of School Education & Literacy (MHRD)  
Shastri Bhavan  
New Delhi-110001
2. Professor Saroj Yadav  
Dean (Academic), NCERT
3. Chief Accounts Officer  
NCERT, New Delhi
4. Assistant Public Relations Officer  
NCERT, New Delhi



## EDUCATIONAL RESEARCH AND INNOVATIONS COMMITTEE

1. Professor Parvin Sinclair  
Director, NCERT
2. Professor B.K. Tripathi  
Joint Director, NCERT
3. Professor Rajaram S. Sharma  
Joint Director, CIET
4. Professor R.B. Shivagunde  
Joint Director, PSSCIVE, Bhopal

### External Experts

5. Professor K.P. Mohanan  
Indian Institute of Science Education and Research (IISER)  
Sai Trinity Building, Sutarwadi, Pashan  
Pune-411021 (Maharashtra)
6. Professor K. Subramaniam  
Homi Bhabha Centre of Science Education  
Tata Institute of Fundamental Research  
V. N. Purav Marg, Mankhurd, Mumbai-400088
7. Professor Vinita Kaul  
Centre for Early Childhood Education and Development  
Dr Ambedkar University, Sector 9, Dwarka  
New Delhi-110077
8. Professor Padma Velaskar  
Centre for Studies in Sociology of Education  
Tata Institute of Social Sciences, PO Box No. 8313  
Deonar, Mumbai-400088 (Maharashtra)
9. Professor Rajeev Sharma  
Ravi J. Maathai Centre for Educational Innovation  
Indian Institute of Management  
Vastrapur, Ahmedabad-380015 (Gujarat)
10. Professor Kumkum Roy  
Centre for Historical Studies  
Jawaharlal Nehru University, New Delhi
11. Professor Arun Kamal  
Maitri Shanti Bhawan  
B.M. Das Road, Patna-800004 (Bihar)
12. Professor Farida Khan  
Department of Educational Studies  
Jamia Millia Islamia, New Delhi



**Representatives of State Councils of Educational Research and Training  
(SCERTs)**

13. Director  
State Council of Educational  
Research and Training (SCERT), (Vidyabhavan), Poojapura P.O.  
Thiruvananthapuram-695012 (Kerala)
14. Director  
Directorate of Educational Research and Training  
Arthuthonot Road, Nongnimmaw, Laitukhrah  
Shilling-793001 Meghalaya

**NCERT Faculty**

15. Professor Saroj Bala Yadav  
Dean (A)
16. Dean (Research)
17. Principal  
Regional Institute of Education  
Shyamla Hills, Bhopal-462013
18. Principal  
Regional Institute of Education, Ajmer-305004
19. Professor B.P. Bhardwaj  
Head, DTE
20. Professor Gauri Srivastava  
Head, DWS
21. Professor Anupam Ahuja  
Head, DEGSN
22. Professor Daya Pant  
Head, DEPF
23. Professor Sridhar Srivastava  
Head, ESD
24. Professor A. K. Srivastava  
Head, DER



## ACADEMIC COMMITTEE OF NIE

1. **Chairperson** Dean (Academic)

2. **External Experts**

- i. Professor K. Subramaniam  
Homi Bhabha Centre for Science Education, V.N. Purav Marg  
Mankhurd, Mumbai
- ii. Dr Amman Madan  
Azim Premji University, PES Institute of Technology Campus, Pixel  
Park, B Block, Electronics City, Hosur Road (Beside NICE Road)  
Bengaluru-560 100, Karnataka
- iii. Dr Anita Dash  
Deptt. of Sociology, Ravenshaw University  
Cuttack, Odisha
- iv. Director  
SCERT, Sikkim  
P.O. Raj Bhavan, Tathangchen  
Gangtok-737103
- v. Professor N. K. Jangira  
Park View Apartment, Sector-15-II  
Gurgaon-122001

3. **Heads of NIE Departments**

1. Head, Deptt. of Education in Science and Mathematics (DESM)
2. Head, Deptt. of Education in Social Sciences (DESS)
3. Head, Deptt. of Education in Languages (DEL)
4. Head, Deptt. of Education Psychology and Foundations of Education
5. Head, Deptt. of Elementary Education (DEE)
6. Head, Deptt. of Education in Art and Aesthetics (DEAA)
7. Head, Deptt. of Education of Groups with Special Needs (DEGSN)
8. Head, Division of Educational Research (DER)
9. Head, Deptt. of Teacher Education (DTE)
10. Head, Educational Survey Division (ESD)
11. Head, International Relations Division (IRD)
12. Head, Deptt. of Gender Studies
13. Head, Planning and Monitoring Division (PMD)
14. Head, Deptt. of Educational Kits (DEK)
15. Head, RMSA Cell



**4. Faculty from NIE Departments**

1. Dr Vijayan K., Assistant Professor, DTE
2. Dr Gagan Gupta, Associate Professor, DESM
3. Dr Prabhat K. Mishra, Assistant Professor, DEPFPE
4. Dr Y. Sreekanth, Professor, ESD
5. Dr Padma Yadav, Associate Professor, DEE
6. Dr Aparna Pandey, Associate Professor, DESS
7. Dr Jyotsna Tiwari, Associate Professor, DEAA
8. Dr Poonam Agrawal, Professor, DER
9. Dr S.C. Chauhan, Associate Professor, DEGSN
10. Dr Mohd. Faruq Ansari, Professor, DEL
11. Dr Anita Nuna, Associate Professor, DGS
12. Dr P.D. Subhash, Assistant Professor, PMD



**MANAGING COMMITTEE OF  
REGIONAL INSTITUTE OF EDUCATION, AJMER**

1. Vice-Chancellor                      Chairman  
M.D.S. University  
Ajmer
2. Principal                              Vice-Chairman  
Regional Institute  
of Education, Ajmer

**Nominee of the Education Department of each of the States and UTs**

3. Commissioner  
Secondary Education  
Govt. of Rajasthan  
Bikaner, Rajasthan
4. Director, SIE  
Chandigarh
5. Director, SCERT  
Punjab
6. Director, SCERT  
Gurgaon, Haryana
7. Regional Director of Education (South), New Delhi
8. Joint Director of Higher Education  
(C-1), Himachal Pradesh
9. Director  
School of Education  
Govt. of Jammu and Kashmir, Jammu
10. Director, SCERT  
Nishatganj, Lucknow  
Uttar Pradesh
11. Deputy Director  
SCERT, Uttarakhand

**Two Experts nominated by the President, NCERT**

12. Professor H.K. Dewan  
Education Advisor  
Vidya Bhawan Society, Udaipur
13. Shri Ashok Ganguly  
Former Chairperson, CBSE

**Nominee of the Director, NCERT**

14. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal.



**Two Heads of the Departments of RIE nominated by the Director**

15. Dr S.K. Paradkar  
Head  
Department of Education in Science and Mathematics  
RIE, Ajmer
16. Dr I.B. Chughtai  
Head  
Department of Education  
RIE, Ajmer

**Such other members as are required to be included by the stipulation of the University to which the Institute is affiliated**

17. Nominee of Vice-Chancellor  
M.D.S. University  
Ajmer
18. Administrative Officer Secretary – Convener



**MANAGING COMMITTEE OF  
REGIONAL INSTITUTE OF EDUCATION, BHOPAL**

- |  |               |
|--|---------------|
| 1. Vice-Chancellor<br>Barkatullah University<br>Bhopal                         | Chairman      |
| 2. Principal<br>Regional Institute of Education<br>Bhopal                      | Vice-Chairman |
| 3. Commissioner of School Education<br>Govt. of Madhya Pradesh<br>Bhopal       |               |
| 4. Commissioner of School Education<br>Government of Chhattisgarh<br>Raipur    |               |
| 5. Director, GCERT<br>Gandhinagar, Gujarat                                     |               |
| 6. Director, MSCERT<br>Pune (Maharashtra)                                      |               |
| 7. Deputy Director<br>SCERT, Goa   |               |
| 8. Assistant Director of Education<br>UT of Daman and Diu<br>Daman             |               |
| 9. Assistant Director of Education<br>UT of Dadra and Nagar Haveli<br>Silvassa |               |

**Two Experts nominated by the President, NCERT**

10. Shri Vinod Raina  
Member  
CABE and NAC
11. Shri Gurumurthy Kasinathan  
Director, IT for Change  
Bengaluru

**Nominee of the Director, NCERT**

12. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal.



**Two Heads of the Departments of RIE nominated by the Director**

13. Professor Reeta Sharma  
Head, DESM  
RIE, Bhopal
14. Dr B. Ramesh Babu  
Head, Department of Education  
RIE, Bhopal

**Such other members as are required to be included by the stipulation of the University to which the Institute is affiliated**

15. Nominee of Vice-Chancellor  
Barkatullah University  
Bhopal
16. Administrative Officer Secretary – Convener



**MANAGING COMMITTEE OF  
REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR**

- |   |               |
|---|---------------|
| 1. Vice-Chancellor<br>Utkal University<br>Bhubaneswar | Chairman      |
| 2. Principal<br>RIE<br>Bhubaneswar                    | Vice-Chairman |

**Nominee of the Education Department of each of the States and UTs**

3. Director  
T.E. and SCERT  
Govt. of Odisha  
Bhubaneswar
4. President  
West Bengal Board of Primary Education  
Salt Lake, Kolkata - 91
5. Principal  
State Institute of Education  
Port Blair  
Andaman and Nicobar Islands
6. Deputy Director  
Directorate of Primary Education  
Department of Human Resource Development  
Govt. of Jharkhand, Ranchi
7. Assistant Director  
Directorate of Research and Training  
Department of Education  
Patna, Bihar

**Two Experts nominated by the President, NCERT**

8. Professsor Chinnarra  
Principal  
Department of Education  
Vishva Bharati, Shanti Niketan
9. Smt Jayshree Ramadoss  
Homi Bhabha Centre for Science and Maths

**Nominee of the Director, NCERT**

10. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal.



**Two Heads of the Departments of RIE nominated by the Director**

11. Professor (Ms) S.P. Patnaik  
Head, Department of Education  
RIE, Bhubaneswar
12. Professor M.K. Satapathy  
Head, Department of Education in Science and Mathematics  
RIE, Bhubaneswar

**Such other members as are required to be included by the stipulation of the University to which the Institute is affiliated**

13. Professor Samson Moharana  
P.G. Department of Commerce  
Utkal University  
Bhubaneswar
14. Administrative Officer Secretary – Convener



**MANAGING COMMITTEE OF  
REGIONAL INSTITUTE OF EDUCATION, MYSORE**

- |   |               |
|---|---------------|
| 1. Vice-Chancellor<br>Mysore University, Mysore           | Chairman      |
| 2. Principal<br>Regional Institute of Education<br>Mysore | Vice-Chairman |

**Nominee of the Education Department of each of the States and UTs**

3. Director, SCERT  
Hyderabad, Andhra Pradesh
4. Director, SCERT  
Bengaluru, Karnataka
5. Director, SCERT  
Thiruvananthapuram, Kerala
6. Director, SCERT  
Chennai, Tamil Nadu
7. OSD, State Training Centre  
Directorate of School Education, Puducherry

**Two Experts nominated by the President, NCERT**

8. Professor Mukunda  
IISC, Bangalore
9. Dr Shailesh Shirali  
Head of Community Maths Centre  
Rishi Valley School, Chittoor

**Nominee of the Director, NCERT**

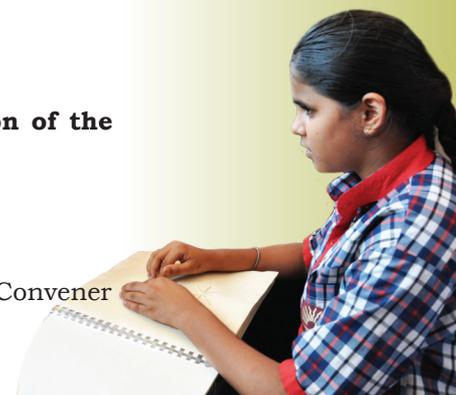
10. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal.

**Two Heads of the Departments of RIE nominated by the Director**

11. Professor V.D. Bhat  
Head, Department of Education  
RIE, Mysore
12. Dr Prema Raghavan  
Head, DESSH  
RIE, Mysore

**Such other members as are required to be included by the stipulation of the University to which the Institute is affiliated**

13. Nominee of Vice-Chancellor  
Mysore University, Mysore
14. Administrative Officer  
Secretary – Convener



**MANAGING COMMITTEE OF  
NORTH-EAST REGIONAL INSTITUTE OF EDUCATION,  
UMIAM (MEGHALAYA)**

- |    |  |               |
|----|--|---------------|
| 1. | Vice-Chancellor<br>North-East Hill<br>University<br>Shillong-793 103 | Chairman      |
| 2. | Principal<br>NERIE,<br>Shillong-793 103                              | Vice-Chairman |

**Nominee of the Education Department of each of the States and UTs**

3. Director, DERT  
Govt. of Meghalaya  
Shillong
4. Director of School Education  
Govt. of Arunachal Pradesh  
Itanagar
5. Director  
SCERT  
Govt. of Assam, Kahilipara  
Guwahati
6. Director  
HRDD (School Education)  
Govt. of Sikkim  
Gangtok
7. Director of School Education  
Govt. of Tripura  
Agartala
8. Director of School Education  
Govt. of Mizoram, Aizawl
9. Director  
SCERT, Govt. of Manipur  
Imphal
10. Director  
SCERT, Govt. of Nagaland  
Kohima

**Two Experts nominated by the President, NCERT**

11. Professor M. M. Singh  
Centre for Science Education  
NEHU, Shillong



12. Professor S. Homchaudhari  
Rachhuga University College  
Aizawl

**Nominee of the Director, NCERT**

13. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal.

**Two Heads of the Departments of RIE nominated by the Director**

14. Dr F. G. Dkhar  
Head, DE  
NERIE, Umiam (Shillong)
15. Dr Subhas Chandra Roy  
Head  
DEE, NERIE  
Umiam (Shillong)

**Such other members as are required to be included by the stipulation of the University to which the Institute is affiliated**

16. Nominee of the Vice-Chancellor  
NEHU, Shillong
17. Administrative Officer Secretary – Convener





## APPENDIX V

### NCERT's Consolidated Sanctioned Strength of Posts as on 31 March 2015 and Reservation Position

Group	Sanctioned Strength	No. of Positions	Scheduled Castes	% of SC Employees	Scheduled Tribes	% of ST Employees	OBC	% of OBC Employees	Physically Handicapped	% of PH Employees
A	714	357	62	17.36	24	6.72	28	7.84	2	0.56
B	466	391	81	20.71	36	9.20	33	8.43	6	1.68
C and D (Including Safaiwala)	1716	590	155	26.27	59	10.00	77	13.05	10	1.69
<b>Total</b>	<b>2896</b>	<b>1338</b>	<b>298</b>	<b>21.46</b>	<b>119</b>	<b>8.89</b>	<b>138</b>	<b>10.31</b>	<b>18</b>	<b>1.34</b>

## APPENDIX VI

### Statement showing Recoveries and Payments of Loans and Advances during the Year 2014-15

Sundry Debtors		
	As on 31-03-2015	As on 31-03-2014
1) Credits Sales with Directorate of Pub. Div. and Urdu Academy	48,96,684	48,96,684
2) Credit Sales (other than DPD)	1,79,865	1,79,865
3) Dues from JandK Govt. (PD)	3,10,792	3,10,792
4) Royalty (PD)	42,429	42,429
5) Books supplied to CBSE	36,59,960	36,59,960
6) Books supplied to Bal Bhawan	-	4,83,596
7) Credit Sales of Books to RIEs and Urdu Academy, New Delhi	22,23,869	42,21,856
	<b>113,13,599</b>	<b>137,95,182</b>
Loans and Advances		
	As on 31-03-2015	As on 31-03-2014
Motor Car/Scooter/Computer adv.	59,47,575	76,59,228
Cycle Advance	60,114	38,664
House Building Advance	59,60,603	78,17,574
Contingent Advance	46,613	46,613
Warm Cloth advance	1,500	1,500
Deposit with DVB	1,15,250	1,15,250
Court Attachment	234,00,000	234,00,000
Bank Guarantee	2696,96,800	2696,96,800
Specific Projects	8,91,872	9,52,076
Advances/depoists with CPWD	5697,69,184	6006,93,869
Deposit with Sale Tax Deptt.	10,00,000	10,00,000
Advances/depoists with ISRO	400,00,000	400,00,000
O/s programme advances (Plan)	5,35,000	12,60,000
O/s programme advances (Non-Plan AEP)	45,99,977	61,49,265
O/s programme advances (SG-RMSA)	3,20,000	-
Payment to be made to Define New Pen. Scheme	1,711	(3,81,039)
New Pension Scheme A/C No.30004257450		
Excess TDS Deposited by Pub. Div/Bill-2	1,31,931	1,16,123
<b>Total</b>	<b>9224,78,130</b>	<b>9585,65,923</b>

Chief Accounts Officer  
NCERT, New Delhi - 110 016

Secretary  
NCERT, New Delhi - 110 016

Annual Report 2014-2015



### National Council of Educational Research and Training Receipts and Payments Account for the year ending 31 March 2015

Receipts	Current Year 2014-15	Previous Year 2013-14	Payments	Current Year 2014-15	Previous Year 2013-14
1. Opening Balances			1. Expenses		
a) Cash Balances	-	-	a) Establishment Expenses	1,82,43,49,991.00	1,10,73,99,385
b) Bank Balances	-	-	b) Academic Expenses	1,83,69,44,884.00	21478,63,540
(i) In current accounts	-	-	c) Administrative Expenses	28,45,71,735.27	2859,07,764
(ii) In Deposit accounts	-	-	d) Transportation Expenses	1,63,67,273.00	-
(iii) Savings accounts	68,52,90,410.25	24,83,43,027	e) Repairs and Maintenance Expenses	1,11,45,430.00	-
2. Grants Received			f) Prior Period Expenses	-	-
a) From Government of India	1,60,31,51,000.00	2,00,94,46,000	2. Payments against Earmarked/ Endowment Funds	-	-
b) From State Government of India	-	-	3. Payments against Sponsored Projects/Schemes	7,00,36,591.00	-
c) From Other Sources (Amount reimbursed from UNFPA/AEP)	2,09,02,115.00	9,62,77,905	4. Payments against Sponsored Fellowships/Scholarships	96,22,025.00	-
(Grants for capital and revenue exp/ to be shown separately if available)	-	-	5. Investments and Deposits made:		
3. Academic Receipts	2,74,59,914.00	2,05,13,58,722	a) Out of Earmarked/Endowments Funds	-	-
4. Receipts against Earmarked/ Endowment Funds	-	-	b) Out of own funds (Investments- Others)	-	-
5. Receipts against Sponsored Projects/Schemes	4,16,20,249.00	-	6. Term Deposits with Scheduled Banks	4,08,87,68,575.00	4,16,16,71,963

6. Receipts against sponsored Fellowships and Scholarships	-	-	-			
7. Income on Investments:						
a) Earmarked /Endowment funds					3,51,20,835.00	4104,43,797
b) Other Investments	71,21,200.00		33,60,58,698		23,36,16,934.00	-
8. Interest received on						
a) Bank Deposits	31,48,51,345.00					
b) Loans and Advances	9,73,669.00		20,01,743			
c) Savings Bank Accounts	1,53,99,929.00		1,50,81,525		14,33,12,958.00	143,87,129
9. Investments encashed	24,90,000.00				2,97,68,84,545.00	31646,90,113
10. Term Deposits with Scheduled Banks encashed	4,09,83,24,388.00		3,92,26,24,400			
11. Other Income (Including Prior Period income)	1,93,94,38,886.50		3,20,17,514			
12. Deposits and Advances	17,50,43,957.62		4,03,31,633			
13. Miscellaneous Receipts including Statutory Receipts	38,24,67,717.00		40,26,48,737			
14. Any Other Receipts	2,97,77,61,751.00		3,23,52,70,850			
<b>Total</b>	<b>12,29,22,96,531</b>		<b>12,39,14,60,754</b>		<b>Total</b>	<b>12,29,22,96,531</b>
						<b>12,39,14,60,754</b>

# Annual Report 2014-2015



## Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of National Council of Educational Research and Training for the year ended 31 March 2015

1. We have audited the attached Balance Sheet of National Council of Educational Research and Training (Council), New Delhi as at 31 March 2015, the Income and Expenditure Account and Receipts and Payments Account for the year ended on that date under Section 20(1) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. The audit has been entrusted for the period up to 2017-18. These financial statements include the accounts of 12 units of the Council. Of these, accounts of three units were audited and comments included in the report. These financial statements are the responsibility of the Council's management. Our responsibility is to express an opinion on these financial statements based on our audit.
2. This Separate Audit Report contains the comments of the Comptroller and Auditor General of India (CAG) on the accounting treatment only with regard to classification, conformity with the best accounting practices, accounting standards and disclosure norms, etc. Audit observations on financial transactions with regard to compliance with the Law, Rules and Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material mis-statements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
  - (i) We have obtained all the information and explanations, which to the best of our knowledge and belief were necessary for the purpose of our audit.
  - (ii) The Income and Expenditure Account and Receipts and Payments Account and Balance Sheet dealt with by this report have been drawn up in the revised format prescribed by the Government of India, Ministry of Human Resource and Development vide order no. 29-4/2012- FD dated 17.04.2015.



- (iii) In our opinion proper books of accounts and other relevant records (including some in the form of customised software) have been maintained by the Council in so far as it appears from our examination of such books.
- (iv) We further report that

## **A. Balance Sheet**

### **A.1 Assets**

#### **A.1.1 Fixed Assets (Schedule 4) – ₹ 113.19 crore**

Addition of Library Books of ₹ 85.15 lakh during the year included ₹ 2.16 lakh on items other than purchase of books which resulted in overstatement of Fixed Assets and Capital Fund by ₹ 2.16 lakh.

#### **A.1.2 Loans, Advances and Deposits (Schedule 8) — ₹ 105.70 crore**

The above do not include licence fee of ₹ 3.47 lakh from ICICI Bank outstanding as on 31.03.2015 resulting in understatement of Loans, Advances and Deposits and Capital Fund by ₹ 3.47 lakh.

## **B. General**

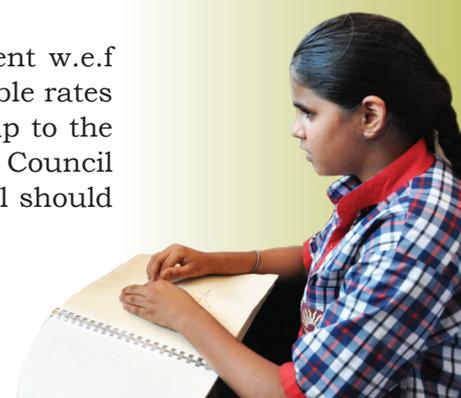
**B.1** A Bank reconciliation of various bank accounts of NCERT amount of ₹ 3.08 crore (Annexure 2) remained unreconciled as detailed below :

- (i) An amount of ₹ 206.88 lakh of cheques were deposited in the bank but not collected.
- (ii) An amount of ₹ 98.19 lakh of cheques were credited by bank but not recorded in cash book
- (iii) An amount of ₹ 2.76 lakh of cheques were debited but not recorded in the cash book.
- (iv) An amount of ₹ 0.63 lakh of cheques were time barred and needs to be written back and shown as liability.

**B.2** As per the notes on accounts No. 12 advances of ₹ 4.20 crore has been given to ISRO but in the accounts advances of ₹ 4 crore only has been shown. This needs to be clarified/rectified. This was pointed out in the last year report but no rectification has been done in the current year accounts.

**B.3** As per Schedule 8, excess TDS of ₹1,31,931 was deposited by the Council as on 31.03.2015. The same may be recovered.

**B.4** The New Pension Scheme was introduced by the Government w.e.f 01.01.2004. The interest on the NPS Subscription at applicable rates was credited to the subscribers account on notional basis up to the year 2011-12. An amount of ₹ 1.67 crore was due from the Council for the period up to 2011-12 as on 31.03.2015. The Council should discharge this liability.



### C. Grant-in-aid

The Council received grant-in-aid during 2014-15 of ₹ 160.32 crore (Plan: ₹ 14.88 crore and Non-Plan: ₹ 145.44 crore) out of which grant of ₹ 29.62 crore (Plan ₹ 3.05 crore and Non-Plan ₹ 26.57 crore) was received in the month of March, 2015. It had an opening balance of ₹ 63.72 crore (Plan: ₹ 2.79 crore and Non Plan: ₹ 60.93 crore) and its own receipts of ₹ 229.43 crore (Plan: ₹ 0.13 crore and Non Plan: ₹ 229.30 crore). It utilised ₹ 428.26 crore (Plan: ₹ 15.66 crore and Non-Plan: ₹ 412.60 crore) leaving an unspent balance of ₹ 25.21 crore (Plan: ₹ 2.14 crore and Non Plan: ₹ 23.07 crore).

It also received grant of ₹ 4.15 crore for sponsored/specific projects from Ministry of Human Resource Development and other agencies during the year along with ₹ 2.22 crore refunds from the sponsored/specific projects and had an opening balance of ₹ 8.99 crore in these projects. Out of the total grant received, ₹ 79.08 lakh was received in the month of March, 2015. Out of the total of ₹ 15.36 crore, an expenditure of ₹ 9.19 crore was incurred by the Council during the year on these projects leaving a balance of ₹ 6.17 crore as on 31 March 2015.

### D. Management Letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director NCERT, through a management letter issued separately for remedial action.

- (v) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.
- (vi) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure-I to this Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India.
  - (a) In so far as it relates to the Balance Sheet, of the state of affairs of the National Council of Educational Research and Training as at 31 March, 2015 and
  - (b) In so far as it relates to Income and Expenditure Account of the deficit for the year ended on that date.

**For and on behalf of the C&AG of India**

**Place: New Delhi**  
**Date: 01.03.2016**

**Director General of Audit**  
**(Central Expenditure)**



**Annexure-1 of Separate Audit Report received from the Comptroller  
and Auditor General of India on the Accounts of National Council  
of Educational Research and Training for the year ended  
31 March 2015**

**1. Adequacy of internal audit system**

The Internal audit system needs to be strengthened.

- (i) None of the unit is audited up to 2014-15.
- (ii) Proper follow up action was not taken by the Management on the reports of internal audit as 522 paras of 11 units were outstanding as on 31.3.2015. Further all eight sanctioned posts were lying vacant in the Internal Audit Cell of the Council.

**2. Adequacy of internal control system**

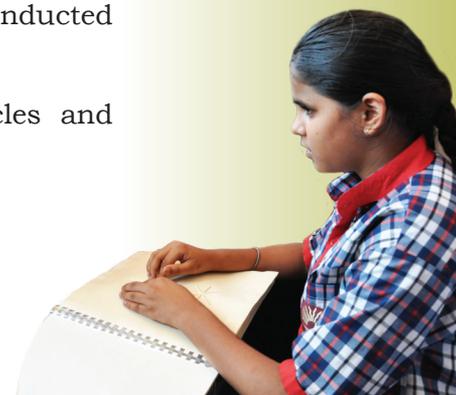
The internal control system of the Council is inadequate due to

- (i) Weak internal audit.
- (ii) Physical verification of fixed assets was not done regularly and physical verification of publication of books was conducted up to October 2014.
- (iii) The opening and closing balances of cash book of Publication Division, NCERT Headquarter were not certified in any of the month of the year 2014-15.
- (iv) The management's response to external audit objections is not effective as 24 paras of NCERT Hqrs. pertaining to the period from 2002-03 to 2013-14 were outstanding as on 31.3.2015. Similarly 40 paras of Publication Division of NCERT pertaining to the period from 1997-98 to 2013-14 and 19 paras of CIET unit of NCERT pertaining to the period 1994-95 to 2009-10 were outstanding as on 31.3.2015.

**3. System of physical verification of fixed assets**

The physical verification of Land and Building had not been conducted since 2009-10.

The physical verification of Furniture and Fixture, Vehicles and Computer accessories is under process.



The physical verification of Library Books for 2006-2014 has been completed and final report of physical verification was awaited.

**4. System of physical verification of inventory**

The physical verification of Publication of books had been conducted up to October 2014.

**5. Regularity in payment of statutory dues**

As per accounts no payment over six months in respect of statutory dues was outstanding as on 31.3.2015.

**Annexure-2 of SAR**

₹ in lakh

Particulars	Time barred	Cheques deposited in bank but not collected	Credited by bank but not recorded in cash book	Debited by bank but not recorded
NCERT Hqrs A/c No. 10137881331		0.32	2.63	0.76
CIET A/c No. 10137881284		0.56		
Publication Division	0.63	206.00	95.56	2.00
	0.63	206.88	98.19	2.76

**Annexure to Management Letter**

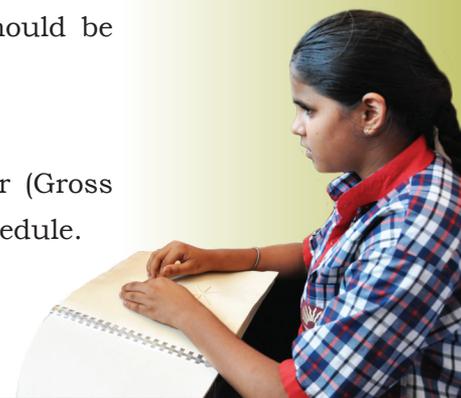
**1. Fixed Assets (Schedule 4) – ₹ 113.19 crore**

Assets of the book value of ₹ 5,79,677 were disposed of during the year and an amount of ₹ 1,22,856 received as scrap value was also shown in



the cash book during the month of September, 2014. However the written down value of these assets amounting to ₹ 47,322 were not deducted from the fixed assets (CIET) resulting in overstatement of Fixed Assets and Capital Fund by ₹ 47,322.

2. An amount of ₹ 20.91 lakh received from NUEPA during 2013-14 towards cost and development charges of land measuring 2100 sq. mt transferred to NUEPA was not intimated to the Ministry. The same has also not been disclosed in the Notes to accounts.
3. As per GFR Rule-84, Proforma accounts are required to be maintained by the subsidiary of any autonomous body if involved in the commercial or quasi-commercial activities. In NCERT, Publication Division is involved in books publication but had not been maintaining Proforma accounts. In the absence of Proforma account of Publication Division State of affairs on the working could not be ascertained.
4. As per schedule-7, Sundry Debtors amounting to ₹ 54.30 lakh and ₹ 36.60 lakh were outstanding since 2000-01 and 2004-05 respectively. As the Sundry Debtors are too old, these are required to be considered as bad debts and necessary disclosure should be made in 'Notes on Accounts' and if considered doubtful by competent authority, provision should be made in accounts.
5. **Consolidation of accounts**  
All the constituent units of NCERT are preparing Receipts and Payment Accounts every month and forwarding the same to the NCERT Hqrs for consolidation. On the basis of Receipts and Payment Accounts received from all the units, at the end of the financial year, consolidated Receipts and Payment Accounts, Balance sheet and Income and Expenditure accounts are prepared at NCERT Hqrs. All the constituents units should prepare the complete set of accounts at the end of the financial year, i.e Receipts and Payments Account, Income and Expenditure Account and Balance Sheet from which the consolidated accounts should be prepared at NCERT Hqrs.
6. Trial Balance has not been prepared by the Council.
7. The written down value of books weeded out during the year (Gross value ₹ 32,488) has not been deducted from the fixed asset schedule.



8. Schedule 10 Grants/Subsidies has not been correctly drawn. Neither the opening balance as on 1.4.2015 has been shown in Schedule nor the expenditure incurred during the year 2014-15. Instead of unutilised grant-in-aid the entire grant has been shown as balance carried forward. The Schedule 10 needs to be rectified.



## Publications Released during the Year 2014-2015

### Textbooks

#### Class I

- *Rimjhim 1*
- *Math-Magic 1*
- *Ganit Ka Jadu I*
- *Marigold I*

#### Class II

- *Rimjhim 2*
- *Math-Magic 2*
- *Ganit Ka Jadu 2*
- *Marigold II*

#### Class III

- *Rimjhim 3*
- *Math-Magic 3*
- *Ganit Ka Jadu 3*
- *Marigold III*
- *Ass-Pass (EVS)*
- *Looking Around I*

#### Class IV

- *Rimjhim 4*
- *Marigold IV*
- *Math-Magic 4*
- *Ganit Ka Jadu 4*
- *Ass-Pass (EVS)*
- *Looking Around (EVS)*

#### Class V

- *Rimjhim 5*
- *Marigold V*
- *Math-Magic 5*
- *Ganit Ka Jadu 5*
- *Ass-Pass (EVS)*
- *Looking Around (EVS)*

#### Class VI

- *Vasant 1*
- *Doorva I*
- *Ruchira Bhag I*

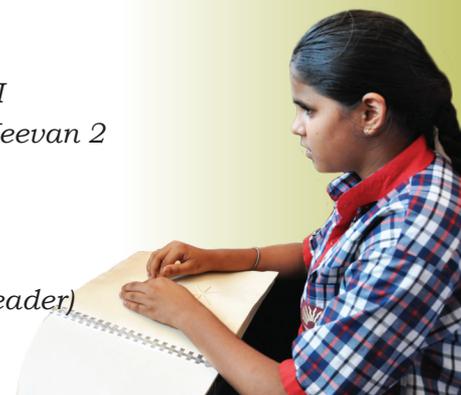
- *Bal Ram Katha (Hindi Supplementary Reader)*
- *Mathematics I*
- *Ganit I*
- *Science*
- *Vigyan I*
- *Honeysuckle (English Reader)*
- *A Pact With the Sun (English Supplementary Reader)*
- *The Earth: Our Habitat*
- *Social and Political Life*
- *Our Past I*
- *Hamare Ateet 1*
- *Samajik Evam Rajnitik Jeevan*
- *Prithvi: Hamara Aavas*

#### Class VII

- *Vasant 2*
- *Bal Mahabharat Katha (Hindi Supplementary Reader)*
- *Doorva 2 (Dwitiya Bhasha)*
- *Ruchira Bhag 2 (Sanskrit)*
- *Honeycomb (English Textbook)*
- *An Alien Hand (English Supplementary Reader)*
- *Mathematics*
- *Ganit*
- *Science*
- *Vigyan I*
- *Our Past II*
- *Hamare Ateet 2*
- *Our Environment*
- *Hamara Paryavaran*
- *Social and Political Life II*
- *Samajik Evam Rajnitik Jeevan 2*

#### Class VIII

- *Vasant 3*
- *Bharat Ki Khoj (Hindi Supplementary Reader)*



- Doorva 3
- Ruchira 3 (Sanskrit)
- Honeydew (English Textbook)
- It so Happened  
(English Supplementary Reader)
- Mathematics
- Ganit
- Science
- Vigyan
- Resources and Development
- Sansadhan Aur Vikas
- Social and Political Life III
- Samajik Evam Rajnitik Jeevan 3
- Our Pasts III Part-I
- Our Pasts III Part-II
- Hamare Ateet 3 Bhag-1
- Hamare Ateet 3 Bhag-2

### Class IX

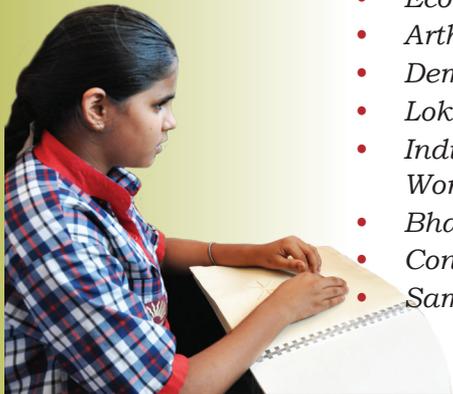
- Kshitij Bhag-1  
(Hindi Core Course)
- Kritika Bhag-1  
(Hindi Core Course)
- Sparsh Bhag-1  
(Hindi Elective Course)
- Sanchayan Bhag-1  
(Hindi Elective Course)
- Beehive (English Textbook,  
Elective Course)
- Moments  
(English Supplementary Reader)
- Shemushi Bhag-1 (Sanskrit)
- Mathematics
- Ganit
- Science
- Vigyan
- Economics
- Arthashastra
- Democratic Politics
- Loktantrik Rajniti
- India and the Contemporary  
World I
- Bharat Aur Samkaleen Vishwa I
- Contemporary India I
- Samkaleen Bharat I

### Class X

- Kshitij Bhag-2  
(Hindi Core Course)
- Kritika Bhag-2  
(Hindi Core Course)
- Sparsh Bhag-2  
(Hindi Elective Course)
- Sanchayan Bhag-2  
(Hindi Elective Course)
- First Flight  
(English Textbook, Elective  
Course)
- Footprints Without Feet  
(English Supplementary  
Reader, Elective Course)
- Shemushi Bhag-2 (Sanskrit)
- Mathematics
- Ganit
- Science
- Vigyan
- India and the Contemporary  
World II
- Bharat Aur Samkaleen Vishwa II
- Democratic Politics II
- Loktantrik Rajniti II
- Contemporary India II
- Samkaleen Bharat II
- Understanding Economic  
Development
- Arthik Vikas Ki Samajh

### Class XI

- Aaroh Bhag-1  
(Hindi Core Course)
- Vitaan Bhag-1  
(Hindi Core Course)
- Antra Bhag-1  
(Hindi Elective Course)
- Antral Bhag-1  
(Hindi Elective Course)
- Woven Words  
(English Elective Course)
- Bhashwati Bhag-1 (Sanskrit)
- Shashwati Bhag-1 (Sanskrit)
- Mathematics



- Ganit
- Biology
- Jeev Vigyan
- Chemistry Part-I
- Chemistry Part-II
- Rasayan Vigyan Bhag-1
- Rasayan Vigyan Bhag-2
- Physics Part-I
- Physics Part-II
- Bhautiki Bhag-1
- Bhautiki Bhag-2
- Themes of World History
- Vishwa Itihas Ke Kuchh, Vishay
- Fundamental of Physical Geography
- Bhautik Bhugol Ke Mool Siddhant
- India: Physical Environment
- Bharat: Bhautik Paryavaran
- Practical Work in Geography Part-I
- Bhugol Mein Prayogatmak Karya Bhag-1
- Statistics to Economics
- Arthashastra Mein Sankhyiki
- Indian Economic Development
- Bhartiya Arthvyavastha Ka Vikas
- Indian Constitution at Work
- Bharat Ka Samvidhan: Siddhant Aur Vyavahar
- Political Theory II
- Rajniti Siddhant 2
- Introducing Sociology
- Samajshastra ka Parichay
- Understanding Society
- Samaj Ka Bodh
- Business Studies
- Vyavasaik Adhyayan
- Accountancy Part-I
- Lekhashastra Bhag-I
- Accountancy Part-II
- Lekhashastra Bhag-2

- Abhiviyakti Aur Madhyam
- Psychology
- Manovigyan Ka Parichay

#### **Class XII**

- Aaroh Bhag-2  
(Hindi Core Course)
- Vitaan Bhag-2  
(Hindi Core Course)
- Antra Bhag-2  
(Hindi Elective Course)
- Antral Bhag-2  
(Hindi Elective Course)
- Flamingo (English Core Course)
- Vistas (English Core Course)
- Kaleidoscope  
(English Elective Course)
- Bhashwati Bhag-2 (Sanskrit)
- Shashwati Bhag-2 (Sanskrit)
- Mathematics Part-I
- Mathematics Part-II
- Ganit Bhag-I
- Ganit Bhag-II
- Biology
- Jeev Vigyan
- Chemistry Part-I
- Chemistry Part-II
- Rasayan Vigyan Bhag-1
- Rasayan Vigyan Bhag-2
- Physics Part-I
- Physics Part-II
- Bhautiki Bhag-1
- Bhautiki Bhag-2
- Themes in Indian History Part-I
- Themes in Indian History Part-II
- Themes in Indian History Part-III
- Bharatiya Itihas Ke Kuchh Vishay Bhag-1
- Bharatiya Itihas Ke Kuchh Vishay Bhag-2
- Bharatiya Itihas Ke Kuchh Vishay Bhag-3



- *Fundamentals of Physical Geography*
- *Manav Bhugol Ke Mool Siddhant*
- *Practical Work in Geography Part-II*
- *Bhugol Mein Prayogatmak Karya Bhag-2*
- *Introductory Microeconomics*
- *Vyashti Arthashastra: Ek Parichay*
- *Introductory Macroeconomics*
- *Samashti Arthashastra: Ek Parichay*
- *Contemporary World Politics*
- *Sankaleen Vishwa Rajniti*
- *Politics in India Since Independence*
- *Swatantra Bharat Mein Rajniti*
- *Social Change and Development in India*
- *Bharat Mein Samajik Parivartan Aur Vikas*
- *Indian Society*
- *Bhartiya Samaj*
- *Business Studies Part-I*
- *Business Studies Part-II*
- *Vyavasaik Adhayan Bhag-1*
- *Vyavasaik Adhayan Bhag-2*
- *Accountancy I: Not-for-Profit Organisation and Partnership Accounts*
- *Lekhashastra 1: Alabhkari Sansthaeyin Evam Sanjhedari Khatey*
- *Accountancy II: Company Accounts and Analysis of Financial Statements*
- *Lekhashastra 2: Company Khate Evam Vittiya Vivranon Ka Vishleshan*
- *Psychology*
- *Manovigyan Ka Parichay*

- *Accountancy – Computerised Accounting System*
- *Craft Tradition of India Textbook in Heritage Craft*
- *Graphic Design*

## Urdu Textbooks

### Class I

- *Riyazee Ka Jadoo 1*
- *Ibtedai Urdu 1*

### Class II

- *Riyazee Ka Jadoo 2*
- *Ibtedai Urdu 2*

### Class III

- *Riyazee Ka Jadoo 3*
- *Aas Pass (EVS)*
- *Ibtedai Urdu 3*

### Class IV

- *Riyazee Ka Jadoo 4*
- *Ibtedai Urdu 4*
- *Aas Pass (EVS)*

### Class V

- *Riyazee Ka Jadoo 5*
- *Ibtedai Urdu 5*
- *Aas Pass (EVS)*

### Class VI

- *Apni Zaban 1*
- *Urdu Guldasta (Supplementary Reader)*
- *Hisab*
- *Science*
- *Zameen Hamara Maskan*
- *Hamare Maazee I*
- *Samaji Aur Siyasi Zindagi 1*
- *Jaan Pehchan (Second Language)*

### Class VII

- *Apni Zaban 2*
- *Urdu Guldasta (Supplementary Reader)*
- *Hisab*



- Science
- Hamare Maazee II
- Samaj Aur Siyasi Zindagi
- Jaan Pehchan (Second Language Urdu Textbook)
- Door-Pass (Third Language)

#### **Class VIII**

- Apni Zaban
- Urdu Guldasta (Supplementary Reader)
- Science
- Hisab
- Wasail Aur Taraqqi (Geography)
- Samaji Aur Siyasi Zindagi
- Hamare Maazee 3 Part-I
- Hamare Maazee 3 Part-2
- Jaan Pehchan (Second Language)
- Door-Pass (Third Language)

#### **Class IX**

- Nawa-e-Urdu
- Gulzar-e-Urdu (Supplementary Reader)
- Riyazee
- Science
- Jamhoori Siyasat 1
- Asri Hindustan 1
- Hindustan Aur Asri Duniya 1
- Ilm-e-Maashiyat (Economics)
- Jaan Pehchan (Second Language)
- Door-Pass (Third Language)
- Sub Rang

#### **Class X**

- Nawa-e-Urdu
- Gulzar-e-Urdu (Supplementary Reader)
- Riyazee
- Science
- Hindustan Aur Asri Duniya 2
- Jamhoori Siyasat 2
- Maashi Taraqqi Ki Samajh
- Jaan Pehchan (Second Language)
- Door-Pass (Third Language)
- Sub Rang

#### **Class XI**

- Gulistan-e-Adab
- Khyaban-e-Urdu (Supplementary Reader)
- Riyazee
- Tabiyat Part-1
- Tabiyat Part-2
- Shumariyaat Barai Mashiyat
- Hindustani Tabai Mahaul
- Hindustan Ki Maashi Taraqqi
- Samajiyat Ka Taarruf
- Hindustani Aain-Usool Aur Kam
- Siyasi Nazaryah
- Karobari Uloom
- Nafsiyat Ka Taarruf
- Tabai Jugraphiya Ke Mubodiyat
- Jugraphiya Mein Amla Kam
- Tareekh-e-Alam per Mabni Mauzuaat (History)
- Samajiyat Ka Taarruf
- Mutala-e-Muashira
- Keemiya Part-1
- Keemiya Part-2
- Hayatiyat Part-1
- Hayatiyat Part-2
- Khatadari Part-1
- Khatadari Part-2
- Computer Aur Muwaslati Technology Part-I
- Computer Aur Muwaslati Technology Part-II
- Dhanak (Supplementary Reader)
- Nai Awaz (Core Urdu Textbook)
- Insani Maholiat Aur Uloom (Part-I)
- Insani Maholiat Aur Uloom (Part-II)
- Hindustan mein Dastgiri ki Jinda Rawayat
- Hindustani Dastkari ki Riwayat ki Talash



## Class XII

- *Gulistan-e-Adab*
- *Khyaban-e-Urdu (Supplementary Reader)*
- *Riyazee Part-1*
- *Riyazee Part-2*
- *Tabiyat Part-1*
- *Tabiyat Part-2*
- *Keemiya Part-1*
- *Keemiya Part-2*
- *Hayatiyat*
- *Tareekh-e-Hind Ke Mouzuat Part-1*
- *Tareekh-e-Hind Ke Mouzuat Part-2*
- *Tareekh-e-Hind Ke Mouzuat Part-3*
- *Khatadari Part-1*
- *Khatadari Part-2*
- *Kulli Mashiyat Ka Taarruf*
- *Juzvi Mashiyat Ka Taarruf*
- *Dhanak (Supplementary Reader)*
- *Insani Jughrafiya Ke Bunyadi Usool*
- *Jughrafiya Mein Amli Kam*
- *Hindustan Avam Aur Mashiyat*
- *Hindustan Mein Samaji Tabdili Aur Taraqqi*
- *Insani Jugrafiya Ke Mubadiyat*
- *Asri Alami Siyasat*
- *Azadi Ke bad Hindustani Siyasat*
- *Hindustani Samaj*
- *Karobari Uloom Part-1*
- *Karobari Uloom Part-2*
- *Nafsiyat*
- *Nai Awaz (Core Urdu Textbook)*
- *Hindustan mein Dastakri ki Riwayat : Mazi, Haal Aur Mustaqbil*
- *Urdu Qawaid aur Insha (for Sec. and Sr. Sec. Stage)*
- *Urdu Zaban-wo Adab ki Tareekh (for Sec. and Sr. Sec. Stage)*

- *Urdu ki Adabi Asnaf (for Sec. and Higher Sec. Stage)*

## Research Reports/ Monographs

- *School Curriculum Structure and Practice*
- *Basics in Education for B.Ed. Course*
- *Mansubati Kitab Baraya Mahaliyati Taleam Higher Secondary Stage (Urdu)*
- *Including Children with Special Needs : Primary Stage*
- *Padhna Ki Dahbeez Par*
- *Every child Matters: A Handbook on quality Early Childhood Education*
- *Teachers Creating inclusive Class Rooms : Issues and Challenges – A Research Study*
- *Customised Teachers Training Package for KGBV Teachers : Mathematics, Teaching of Algebra, Ratio and Proportion, Mansuration Data Handling and Annexure Book-3*
- *Manual of Upper Primary Science Kit Classes VI, VII and VIII*
- *Skills in Environmental Studies through language and Maths in Early Grade*

## NCF-2005, Position Paper National Focus Group

- *NCF-2005, Position Paper, National Focus Group on Aims of Education*
- *NCF-2005, Position Paper, National Focus Group on Curriculum Syllabus and Textbooks*
- *NCF-2005, Position Paper, National Focus Group on Teaching of Indian Languages*
- *NCF-2005, Position Paper, National Focus Group on Teaching of Mathematics*



- *Rashtriya Pathyacharya ki Rooprekha 2005, Ganit Shikshan Rashtriya Focus samuh ka adhar patra*
- *Rashtriya Pathyacharya ki Rooprekha 2005, Vigyan Shikshan Rashtriya Focus samuh ka adhar patra*
- *Rashtriya Pathyacharya ki Rooprekha 2005, Samajik Vigyan Shikshan Rashtriya Focus samuh ka adhar patra*
- *NCF-2005, Position Paper, National Focus Group on Arts Music Dance and Theatre*
- *NCF-2005, Position Paper, National Focus Group on Examination Reforms*
- *NCF-2005, Position Paper, National Focus Group on Educational Technology*
- *NCF-2005, Position Paper, National Focus Group on Gender Issues in Education*
- *NCF-2005, Position Paper, National Focus Group on Health and Physical Education*

#### **Textbooks for Optional Subject**

- *Rasayan Prayogshala Pustika Kaksha – II*
- *Science Exemplar Problems Class VIII*
- *Science Exemplar Problems Class VI*
- *Physics, Exemplar Problems Class XI*
- *Bhoutiki Prashan Pradarshika Kaksha – II*
- *Chemistry Exemplar Problems Class XII*
- *Science : Exemplar Problems Class IX*
- *Chemistry: Exemplar Problems Class XII*
- *Science Exemplar Problems Class VII*

- *Mathematics Exemplar Problems Class IX*
- *Physics Exemplar Problems Class XII*
- *Science Exemplar Problems Class X*
- *Mathematics : Exemplar Problems for Class XI*
- *Mathematics : Exemplar Problems for Class X*
- *Laboratory Manual Science Class X*
- *Prashna Perdarshika Jeev Vigyan Class XI*
- *Biology Exemplar Problems for Class XII*
- *Rasayan: Prashna Pardarshika Class – XII*
- *Laboratory Manual Science for Class X*
- *Readiness Activities for Beginners : Activity Book – I*
- *Biology Exemplar Problems Class XI*
- *Mathematics Exemplar Problem for Class XII*
- *Source Book on assessment Health and Physical Education for Classes I – V*
- *Laboratory Manual: Science at Upper Primary Stage*
- *Ganit Prashna Pardarshika*

#### **Teachers Guide**

- *What is RTE? A handbook for Teachers*
- *Mathematics Teaching of Geometry, Book of Customised Teachers Training Package for KG Teachers*
- *Teacher's Handbook in Early Childhood Care and Education*
- *Shikshan Aur Adhigam Ki Srijanatamak Padhatiyan: Madhymik Star Ke Shikshakon Ke Liye Sandarshika*



### Children's Literature Series

- *Hello Rain*
- *Knock*
- *Catch Me: If you can*
- *May be it is?*
- *The Three Rabbits*

### Supplementary Reader

- *Celullar Jail Aur Hamari Azadi Ki Jidd-O-Jhed (Urdu)*
- *Dr Bhim Rao Ambedkar : Hayat Aur Karname (Urdu)*
- *Social Thinkers of Modern India : Contemporaries of Swami Vivekananda*

### Barkha Series

- *Rani Bhi*
- *Mun Mun Aur Munnu*
- *Tota*
- *Mithai*
- *Gilli Danda*
- *Chhupan Chhupai*
- *Maza Aa Gaya*
- *Mili Ka Gubbara*
- *Meethe Meethe Gulgule*
- *Phuli Roti*
- *Oon Ka Gola*
- *Hich Hich Hichki*
- *Moni*
- *Chimti Ka Phool*
- *Jeet Ki Pipni*
- *Out*
- *Hamari Patang*
- *Sharbat*
- *Pattal*
- *Chawal*
- *Mausi Ke Moze*
- *Mere Jaisi*
- *Koodti Juraben*
- *Talab Ke Maze*
- *Babli Ka Baja*
- *Jhoola*
- *Mili Ke Baal*

- *Tosia Ka Sapna*
- *Chai*
- *Gol Gappe*
- *Peeloo Ki Gulli*
- *Nani Ka Chashma*
- *Chunni Aur Munni*
- *Mini Ke Liye Kya Loon?*
- *Chalo Pipni Banaein*
- *Tabla*
- *Mily ki cycle*
- *Paka Aam*
- *Gehoon*
- *Bhutta*

### Unpriced Publication

- *NCERT Annual Report 2013-14*
- *NCERT Varshik Report 2013-14*
- *NCERT Annual Accounts 2013-14*
- *NCERT Varshik Lekha 2013-14*
- *Training Package for Upper Primary Teachers of North-Eastern Region Padagogy, Science and Mathematics*
- *Guidelines: SLMME for Children 2014-15 and 42nd JLNSME Exhibition for Children 2015 for preparation of Exhibition and Modules and organising Exhibitions*
- *Structure and working of Exhibition, 41st JLNSME Exhibition of Children 2014*
- *Folder of Exhibition, 41st JLNSME Exhibition of Children 2014*

### Journals

- *Journal of Indian Education February 2012 Issue*
- *The Primary Teacher January and April 2013 issue*
- *Indian Educational Review July 2013 issue*



- *Prathmik Shikshak*  
October 2013 issue
- *Journal of Indian Education*  
May 2012 issue
- *Bhartiya Adhunik Shiksha*  
January 2012 Ank
- *Bhartiya Adhunik Shiksha* July  
2012 Ank
- *Bhartiya Adhunik Shiksha* April  
2012 Ank
- *The Primary Teacher*  
July – October 2013 issue
- *Journal of Indian Education*  
August 2012 issue

- *Prathmik Shikshak*  
July 2013 issue
- *Prathmik Shikshak*  
January 2014 issue
- *The Primary Teacher*  
January – April 2014 issue
- *Journal of Indian Education*  
November 2012 issue
- *Indian Educational Review*  
January 2014 issue
- *Journal of Indian Education*  
February 2013 issue
- *Journal of Indian Education*  
May 2013 issue

# Annual Report 2014-2015



**NCERT Constituents and Faculty****A. NATIONAL INSTITUTE OF EDUCATION (NIE)****Department of Elementary Education (DEE)****Professors**

1. Dr Manju Jain, Head
2. Dr Santosh Sharma
3. Dr Yogesh Kumar
4. Dr Lata Pandey

**Associate Professors**

5. Dr A.K. Rajput
6. Dr V.P. Singh
7. Mrs Padma Yadav
8. Dr Pushpa Mandal
9. Dr Usha Sharma
10. Dr Sandhya Sangai
11. Dr Kavita Sharma

**Assistant Professors**

12. Sh Ramesh Kumar
13. Mrs Reetu Chandra
14. Dr Romila Soni
15. Dr Vardha Mohan Nikalje

**Department of Education of Groups with Special Needs (DEGSN)****Professors**

1. Dr Anupam Ahuja, Head
2. Dr Anita Julka

**Associate Professors**

3. Dr S.C. Chauhan
4. Sh Vinay Kumar Singh

**Assistant Professor**

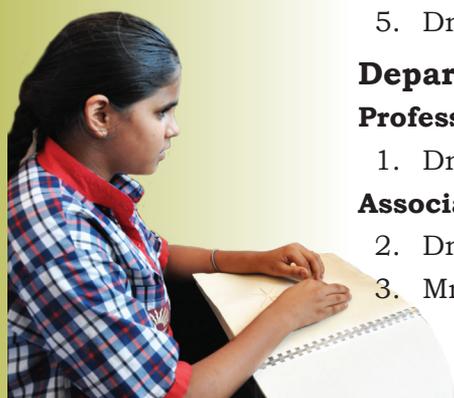
5. Dr Bharti

**Department of Gender Studies (DGS)****Professor**

1. Dr Gauri Srivastava, Head

**Associate Professors**

2. Dr Mona Yadav
3. Mrs Anita Nuna



**Department of Education in Science and Mathematics (DESM)****Professors**

1. Dr A.K. Wazalwar, Head
2. Dr Sunita Farkya
3. Dr Dinesh Kumar

**Associate Professors**

4. Dr Gagan Gupta
5. Dr Alka Mehrotra
6. Dr R.P. Maurya
7. Dr Anjni Kaul

**Assistant Professors**

8. Dr Shimray C. Varichung
9. Ms Sunita L. Varte
10. Mrs Shashi Prabha
11. Dr Ruchi Verma
12. Dr Til Prasad Sharma
13. Dr Rachna Garg
14. Sh R. Risoreng Koireng
15. Ms Pushp Lata Verma
16. Sh Rejaul Karim Barbhuiya
17. Dr Ashish Kumar Srivastava
18. Dr Pramila Tanwar

**Division of Educational Kits (DEK)****Professor**

1. Dr R.K. Parashar, Head

**Department of Teacher Education (DTE)****Professors**

1. Dr Brahm Prakash Bharadwaj, Head
2. Dr Rajrani

**Associate Professors**

3. Dr Kiran Walia
4. Dr Madhulika S. Patel

**Assistant Professors**

5. Dr K. Vijayan
6. Dr Jitender Kumar Patidar

**Department of Education in Social Sciences (DESS)****Professors**

1. Dr Neeraja Rashmi, Head



2. Dr Saroj Yadav
3. Dr Manju Bhatt
4. Dr Meenu Nandrajog
5. Dr P. K. Mandal
6. Dr Shipra Vaidya

**Associate Professors**

7. Dr Aparna Pandey
8. Dr Shankar Sharan (on lien)
9. Mrs Mily Roy Anand

**Assistant Professors**

10. Sh M.V. Srinivasan
11. Dr Seema Shukla Ojha
12. Dr Reetu Singh
13. Dr Tannu Malik
14. Dr Jaya Singh
15. Dr Pratima Kumari
16. Dr M.V.S.V. Prasad
17. Dr Ashita Raveendran
18. Sh Harish Kumar Meena
19. Dr Bijaya Kumar Malik

**DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)**

**Professor**

1. Dr Pawan Sudhir, Head

**Associate Professor**

2. Dr Jyostna Tiwari

**Assistant Professor**

3. Dr Sarvari Banerjee

**Department of Education in Languages (DEL)**

**Professors**

1. Dr K.C. Tripathi, Head
2. Dr Chandra Sadayat
3. Dr Sandhya Singh
4. Dr Mohd. Faruq Ansari

**Associate Professors**

5. Dr Diwan Hannan Khan
6. Dr Jatindra Mohan Mishra
7. Dr Kirti Kapoor
8. Dr Mohd. Moazzamuddin
9. Dr Sanjay Kumar Suman



### **Assistant Professors**

10. Dr Chaman Ara Khan
11. Dr Ranjit Behera (on lien)
12. Sh R. Meghanathan
13. Sh Naresh Kohli
14. Dr Pramod Kumar Dubey
15. Mrs Meenakshi Khar
16. Dr Neelkanth Kumar

### **RMSA Project Cell**

#### **Professors**

1. Dr Ranjana Arora, Head
2. Dr Sharad Sinha

#### **Assistant Professors**

3. Dr K.V. Sridevi
4. Dr S.K. Pandey

### **Department of Educational Psychology and Foundations of Education (DEPFE)**

#### **Professors**

1. Dr Anjum Sibia, Head
2. Dr Daya Pant

#### **Assistant Professors**

3. Dr P.K. Mishra
4. Mrs Shradha Dilip Dhiwal
5. Dr Sushmita Chakraborty
6. Mrs Ruchi Shukla
7. Ms Deepmala

### **Educational Survey Division (ESD)**

#### **Professors**

1. Dr Sridhar Srivastava, Head
2. Dr Y. Sreekanth

#### **Associate Professors**

3. Dr A.D. Tewari
4. Dr Santosh Kumar
5. Dr Veerpal Singh
6. Dr Indrani Bhaduri

#### **Assistant Professors**

7. Dr Vishal D. Pajankar
8. Sh Sukhvinder



9. Dr Satya Bhushan
10. Dr Gulfam

### **Division of Educational Research (DER)**

#### **Professors**

1. Dr A.K. Srivastava, Head
2. Dr Poonam Agrawal

#### **Associate Professors**

3. Dr N.K. Gupta
4. Dr Rajendra Pal

### **Planning and Monitoring Division (PMD)**

#### **Professor**

1. Dr M. Siraj Anwar, Head

#### **Assistant Professor**

2. Dr P.D. Subhash

### **International Relation Division (IRD)**

#### **Professor**

1. Dr Poonam Agrawal, Head

### **Library and Documentation Division (LDD)**

#### **Deputy Librarian**

1. Dr Moorttimatti Samantaray, I/c Head

#### **Assistant Librarian**

2. Mrs Pooja Jain

### **Publication Division**

1. Professor N.K. Gupta, Head
2. Shri Gautam Ganguly, Chief Business Manager
3. Dr (Ms) Shveta Uppal, Chief Editor
4. Shri Arun Chitkara, Chief Production Officer (Incharge)

### **Central Institute of Educational Technology (CIET)**

#### **Professors**

1. Dr Rajaram Sharma, Joint Director
2. Dr A.P. Behera

#### **Associate Professors**

3. Dr Kamlesh Rai
4. Dr Lal Singh
5. Dr Jitender Singh

#### **Assistant Professors**

6. Sh R.K. Nimesh



7. Dr Indu Kumar
8. Dr Anubhuti Yadav (on lien)
9. Dr Ranjan Biswas
10. Dr Purushottam Kumar
11. Dr D. S. Shankar

**B. PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE), BHOPAL**

**Professors**

1. Dr R.B. Shivagunde, Joint Director
2. Dr P. V. Prakasa Rao
3. Dr R. K. Shukla
4. Dr Mridula Saxena
5. Dr Suniti Sanwal
6. Dr R. K. Pathak
7. Dr Asfa M. Yasin
8. Dr Saurabh Prakash
9. Dr V. S. Malhotra

**Associate Professors**

10. Sh A. Palanivel
11. Dr Vipin Kumar Jain
12. Dr Pinki Khanna
13. Dr Abhijit Nayak
14. Dr Kuldeep Singh

**Assistant Professors**

15. Sh Deepak Shudhalwar
16. Dr P. Veeraiah
17. Dr Uadal Singh

**C. REGIONAL INSTITUTES OF EDUCATION (RIE)**

**RIE, Ajmer**

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2. Dr J. P. Bagchi
3. Dr Vijay Pal Singh
4. Dr P. C. Agarwal

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6. Dr Kondru Chandra Sekhar
7. Dr Asha K. V. D. Kamath



8. Dr Saryug Yadav
9. Dr Bidyadhar Barthakur
10. Dr Sudhir Kumar Kataria
11. Dr P. K. Chaurasia
12. Dr Rajesh Mishra
13. Dr Ram Niwas
14. Dr S. V. Sharma

### **Assistant Professors**

15. Sh Aysuhman Goswami
16. Sh Meenakshi Meena
17. Sh Muzammil Hasan
18. Sh O. P. Meena
19. Sh Albert Haro
20. Sh J. P. Narayan
21. Sh Anand Kumar Arya
22. Dr Anil Kumar Nainawat
23. Dr Ram Babu Pareek
24. Dr R. K. Sharma
25. Dr Patanjali Sharma
26. Dr Rana Pratap
27. Sh V. P. Arya
28. Dr A. K. Gupta
29. Dr Rajiv Ranjan
30. Dr Babulal Mali
31. Dr B. K. Jha, Asstt. Librarian

### **RIE, Bhopal**

#### **Professors**

1. Dr H. K. Senapaty, Principal
2. Dr K. K. Khare
3. Dr B. Ramesh Babu
4. Dr Kiran Mathur
5. Dr Jaydip Mandal
6. Dr I. B. Chughtai
7. Dr Lalchand Ram

#### **Associate Professors**

8. Dr Lallan Kumar Tiwary
9. Dr Nidhi Tiwari
10. Dr Ratanmala Arya



11. Dr Ramkar Raizada
12. Dr P.K. Kulshethra

**Assistant Professors**

13. Dr Anand Valmiki
14. Sh S.K.B. Pandagale
15. Dr N.C. Ojha
16. Mrs Sarika C. Saju
17. Sh Sudhakar Wadeker
18. Sh Rizban-ul-Haque
19. Sh R.A. Singh
20. Sh M.S. Kalidas
21. Sh Premananda Sethy
22. Dr (Ms) M. Daksha Parmar
23. Ms Chitra Singh
24. Dr Rashmi Singhai
25. Sh R.P. Prajapati
26. Dr Rashmi Sharma
27. Dr K.A.S.S.V.K. Rao
28. Dr A.K.Gargh
29. Sh Aji Thomas
30. Dr Kalpna Maski
31. Dr Shivalika Sarkar
32. Sh Lokendra Singh Chauhan
33. Dr Saurabh Kumar
34. Dr Shruti Tripathi
35. Dr Vanthangpui Khobung
36. Dr P. K. Tripathy, Asstt. Librarian

**RIE, Bhubaneswar**

**Professors**

1. Dr K.B. Rath, Principal
2. Dr M.K. Satapathy
3. Dr B.N. Panda
4. Dr P.C. Acharya
5. Dr A.K. Mohapatra
6. Dr B.K. Parida
7. Dr (Mrs) Manasi Goswami
8. Dr Dhanalaxmi Das
9. Dr (Mrs) Sandhya Rani Sahoo
10. Dr Anoop Kumar



## **Associate Professors**

11. Dr I.P.Gowramma
12. Dr O. N. Singh
13. Dr S. K. Das
14. Dr S. P. Mishra
15. Dr A. Ramulu
16. Dr Madhuri Mohapatra
17. Dr (Mrs) J. Mohapatra
18. Dr (Mrs) N. Chhotray
19. Dr P.K. Das
20. Dr Ratanjali Das
21. Ms Shampa Das

## **Assistant Professors**

22. Sh S. Ganeswar Rao
23. Dr Ramakant Mohalik
24. Dr Laxmi Dhar Behera
25. Dr (Ms) Elizabeth Gangmai
26. Dr (Mrs) Rasmirekha Sethy
27. Mrs Ratanjali Das
28. Sh Arup Kumar Saha
29. Sh Saurabh Kapoor
30. Dr Babulal Mali
31. Dr P. K. Patnaik
32. Smt. Shatruppa Palit
33. Dr Kalinga Ketaki
34. Dr Basanta Kumar Panda
35. Dr P.L. Negi, Librarian

## **RIE, Mysore**

### **Professors**

1. Dr D.G. Rao, Principal
2. Dr T.J. Vidyapati
3. Dr V.D. Bhatt
4. Dr S. Ramaa
5. Dr U. Lakshmi Narayan
6. Dr M.U. Paily
7. Dr (Mrs) Manjula P. Rao
8. Dr C.G.V. Murthy
9. Dr B.S.P. Raju
10. Dr V.V. Anand



11. Dr B. S. Upadhaya
12. Dr Malli Gandhi
13. Dr G. V. Gopal

**Associate Professors**

14. Dr Kalpana Venugopal
15. Dr G. Vishwanathappa
16. Dr C. Padmaja
17. Dr R. Ravichandran
18. Dr Ramdas V.
19. Dr Prema Raghavan
20. Dr (Mrs) Geeta G. Nair
21. Dr (Mrs) M.S. Srimathi

**Assistant Professors**

22. Dr A.S.N. Rao Sinda
23. Dr T.V. Soma Sakher
24. Dr Anil Kumar K.
25. Dr Sujata B. Hachinkar
26. Dr V. Chandranan
27. Mrs V. Rani Prameela
28. Dr P. R. Harinath
29. Dr V. Prasad
30. Dr K.K.B. Shaji
31. Dr S. Chinnappanavar
32. Shri P. Tamilselvan
33. Sh Raman Naboodiri
34. Sh Santosh Kumar
35. Dr V. Tangpu
36. Dr V.S. Prasad
37. Sh Madhu B.
38. Dr Sarvesh Maurya
39. Dr Suresh Kumar
40. Dr S. Nagaraja, Librarian

**NERIE, Umiam (Shillong)**

**Professors**

1. Dr A. Sukumar, Principal
2. Dr M.K. Mishra
3. Dr Nityanand Pradhan
4. Dr Subhas Chandra Roy



**Associate Professors**

5. Dr Ph. Brajayanti Devi
6. Dr Flourette G. Dkhar
7. Dr (Mrs) Balaiada R. Dkhar
8. Dr Shatarupa Palit

**Assistant Professors**

9. Dr (Ms) Tulika Dey
10. Dr (Mrs) Basansy KharLukhi
11. Dr Sima Saigal
12. Dr (Ms) Prachi Ghildyal
13. Ms Melissa Gracil Wallang
14. Sh Tasongwi Newmei
15. Ms Chanambam Sarajubala Devi
16. Dr Abhay Kumar
17. Sh Mohd. Mamur Ali
18. Sh Arnab Sen
19. Sh R.A. Singh
20. Dr Umesh Kumar Sharma

