

NCERT Annual Report 2018–2019



N C E R T

Annual Report 2018–2019

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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

February 2020
Magha 1941

PD 5H BS

© ***National Council of Educational Research and Training, 2020***

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, B-3/1, Okhla Industrial Area, Phase-II, New Delhi – 110 020

Foreword

The Annual Report presents a glimpse of initiatives undertaken by the National Council of Educational Research and Training for the year 2018–19. NCERT, the apex body working in the area of school education, provides leadership, strengthens the national education system and caters to the needs of the States and UTs. The Council has emerged as a guiding force to build up a progressive system of education that can help in utilising the human resources as a dividend to the country.

The NCERT *Annual Report 2018–19*, to take its mission forward, provides insights into the concerns, priorities and activities of its constituent units. The Council has undertaken various research studies, development activities, capacity building programmes and extension activities to reach out every child located in the remotest corner of the country. It has brought out the district wise reports of the National Achievement Survey and more than 500 publications, which includes textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment and educational journals. The Council has further ventured into development of online courses, learning outcomes for the secondary stage, curriculum frameworks for four-year integrated B.Ed, ICT curriculum, vocational education curricular materials, educational media programmes, handbooks for teachers working in special training centres for Out of School Children (OoSC), student workbooks, etc. The NCERT also initiated a live interactive programme ‘Guidance for Students: Exam Helpline’ on its ‘SWAYAM Prabha’ 24×7 educational DTH-TV channel specifically for students appearing for the board examinations. In another unique initiative, the Council developed an integrated teacher training model and partnered with the state of Tripura to reach out to around 31,000 teachers in the State.

The Council has extended its outreach in the global arena, collaborating with various multilateral agencies, foreign institutions and countries. In partnership with UNESCO, Asia-Pacific Centre of Education for International Understanding (APCEIU) and Korean Funds-in-Trust Project, the Council organised a Sub-regional Meeting-cum-workshop on ‘Integrating SDG 4.7 and Global Citizenship Education (GCED) into Teacher Training in South Asia’. For NCERT, equipping learners with values, knowledge and skills required for building a sustainable society is not only a moral imperative but also a dimension of quality education. The Council has been providing platforms for dialogue and supporting stakeholders to enhance the implementation of GCED.

In nutshell, we have been striving to take our mission forward, collaborating with new partners and working with various ministries, States and organisations. I appreciate the teamwork, dedication and hardwork of my colleagues at various constituents of NCERT across the country for creating an inspiring and innovative environment guiding schools of today in the path of tomorrow. I would like to thank my colleagues in the Planning and Monitoring Division for their contribution in bringing together the Council’s achievements and landmarks for the year in this Annual Report.

I am confident that, in the forthcoming year, we will make another leap forward in advocating policy changes and developing the National Curricular Framework. We are in the midst of working on the integrated teacher training model for the entire country, which we intend to implement through extensive stakeholders' involvement. We have a long way to go and I am confident that with the cooperation of all stakeholders in school education, NCERT will be able to achieve its goal of providing quality education to all children in the country.

New Delhi
October 2019

Hrushikesh Senapaty
Director
National Council of Educational
Research and Training

Abbreviations

AC	Academic Committee
AEP	Adolescent Education Programme
AEP-MIS	Adolescent Education Programme-Management Information System
AI	Artificial Intelligence
AICTE	All India Council for Technical Education
AIL	Art Integrated Learning
AKS	Academy of Korean Studies
APCEIU	Asia-Pacific Centre of Education for International Understanding
APEID	Asia-Pacific Programme of Educational Innovation for Development
ARC	Adolescence Resource Centre
ARSH	Adolescent Reproductive and Sexual Health
AWP	Annual Work Plan
B.A.	Bachelor of Arts
B.A.Ed.	Bachelor of Arts And Education
B.Ed.	Bachelor of Education
B.El.Ed.	Bachelor of Elementary Education
B.Sc.	Bachelor of Science
B.Sc. B.Ed.	Bachelor of Science and Bachelor of Education
B.Sc. Ed.	Bachelor of Science Education
B.Tech.	Bachelor of Technology
BAS	Bhartiya Adhunik Shiksha
BAS	Baseline Assessment Survey
BHU	Banaras Hindu University
BRC	Block Resource Centre
CABE	Central Advisory Board of Education
CAPE	Comprehensive Access to Primary Education
CAS	Computerised Accounting System
CATC	Combined Annual Training Camp
CBSE	Central Board of Secondary Education
CBT	Competency Based Teaching
CCE	Continuous and Comprehensive Evaluation
CIET	Central Institute of Educational Technology
CMP	Common Minimum Programme
COETG	Centre of Excellence in Tactile Graphics
CoL	Commonwealth of Learning
CRC	Cluster Resource Centre
CRISP	Centre for Research and Industrial Staff Performance
CSIR	Council of Scientific and Industrial Research

CTE	College of Teacher Education
CTES	Certificate Programme for Teaching of Elementary School Science
CTSA	Centre Tibetan Schools Administration
CWA	Children with Autism
CwD-	Children with Disability
CWSN	Children with Special Needs
D.El.Ed.	Diploma in Elementary Education
DAB	Departmental Advisory Board
DACEP	Developmental Activities in Community Education and Participation
DCGC	Diploma Course in Guidance and Counselling
DCS	Department of Curriculum Studies
DEAA	Department of Education in Arts and Aesthetics
DEE	Department of Elementary Education
DEGSN	Department of Education of Groups with Special Needs
DEK	Division of Educational Kits
DEL	Department of Education in Languages
DELNET	Developing Library Network
DEME	Department of Educational Measurement and Evaluation
DEPFE	Department of Educational Psychology and Foundations of Education
DER	Division of Educational Research
DETR	Directorate of Educational Research and Training
DES	Department of Educational Survey
DES&DP	Department of Educational Survey and Data Processing
DESDP	Department of Educational Survey and Data Processing
DESM	Department of Education in Science and Mathematics
DESS	Department of Education in Social Sciences
DGS	Department of Gender Studies
DICT	Department of Information and Communication Technology
DIET	District Institute of Education and Training
DMS	Demonstration Multipurpose School
DOE	Directorate of Education
DPEP	District Primary Education Programme
DPR	Detailed Project Report
DSE&L	Department of School Education and Literacy
DTE	Department of Teacher Education
DTEE	Department of Teacher Education and Extension
DVD	Digital Versatile Disc
ECCE	Early Childhood Care and Education
ECE	Early Childhood Education
ED	Engineering Division
EDUSAT	Educational Satellite
EE	Elementary Education

ELP	Early Literacy Programme
ERIC	Educational Research and Innovations Committee
ESD	Educational Survey Division
ESMP	Early School Mathematics Programme
ET	Educational Technology
EVS	Environmental Studies
FA	Formative Assessment
FAQ	Frequently Asked Question
FOSS	Free and Open Source Software
FSSAI	Food Safety and Standard Authority of India
GCED	Global Citizenship Education
GCRC	Guidance and Counselling Resource Centre
GoI	Government of India
HEFS	Human Ecology and Family Sciences
HEI	Higher Education Institute
HEIs	Higher Education Institutes
HRD	Human Resource Development
IAB	Institute Advisory Board
IASE	Institute of Advanced Studies in Education
ICDS	Integrated Child Development Scheme
ICT	Information and Communication Technology
IEA	International Association for the Evaluation of Educational Achievement
IER	Indian Educational Review
IIT	Indian Institute of Technology
IJET	Indian Journal of Educational Technology
INDEM	Inter Demonstration School Meet
IRD	International Relations Division
ISLP	Integrated School Language Programme
ISMP	Integrated School Mathematics Programme
IT	Information Technology
ITPD	In-service Teachers Professional Development
JIE	Journal of Indian Education
JNNSMEE	Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children
JNV	Jawahar Navodaya Vidyalaya
KGBV	Kasturba Gandhi Balika Vidyalaya
KRIVET	Korean Institute of Vocational Education and Training
KRP	Key Resource Person
KVS	Kendriya Vidyalaya Sangathan
KWDI	Korean Women's Development Institute
KYA	Know Your Aptitude
LDD	Library and Documentation Division

M.Ed.	Master of Education
M.Phil	Master of Philosophy
MC	Managing Committee
MDM	Mid-day Meal
MHRD	Ministry of Human Resource Development
MIL	Modern Indian Languages
MOOC	Massive Open Online Course
MoU	Memorandum of Understanding
MP	Madhya Pradesh
MPD	Media Production Division
NAS	National Achievement Survey
NBB	National Bal Bhavan
NBT	National Book Trust
NCC	National Cadet Corps
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCFTE	National Curriculum Framework for Teacher Education
NCT	National Capital Territory
NCTE	National Council for Teacher Education
NDG	National Development Group
NE	North-East
NER	North-East Region
NE-RIE	North-East Regional Institute of Education
NESAC	North-Eastern Space Applications Centre
NGO	Non-Governmental Organisation
NIE	National Institute of Education
NIOS	National Institute of Open Schooling
NITTTR	National Institute of Technical Teacher and Training and Research
NLEPT	National Library of Education and Psychological Tests
NOS	National Occupational Standard
NPE	National Policy on Education
NPEGEL	National Programme for Education of Girls at Elementary Level
NPEP	National Population Education Project
NPEP	National Population Education Project
NQF	National Qualifications Framework
NRCVE	National Resource Centre for Value Education
NRG	National Resource Group
NROER	National Repository of Open Educational Resources
NSDC	National Skill Development Council
NSQF	National Skills Qualifications Framework
NTSE	National Talent Search Examination
NTSS	National Talent Search Scheme

NUD	National Unity Day
NUEPA	National University of Educational Planning and Administration
OB	Operation Blackboard
OER	Open Educational Resources
OOSC	Out of School Children
PAB	Project Approval Board
PAC	Programme Advisory Committee
PECR	Primary Education Curriculum Renewal
PGDGC	Post Graduate Diploma in Guidance and Counselling
PGT	Post Graduate Teacher
Ph.D.	Doctor of Philosophy
PINDICS	Performance Indicators
PMD	Planning and Monitoring Division
P-MOST	Programme of Mass Orientation of School Teachers
POA	Programme of Action
PRD	Planning and Research Division
PSAC	Primary School Achievement Certificate
PSSCIVE	Pandit Sunderlal Sharma Central Institute of Vocational Education
PTM	Parents Teacher Meeting
PTR	Pupil Teacher Ratio
R&D	Research and Development
RAA	Rashtriya Avishkar Abhiyan
RCSME	Resource Centre for Science and Mathematics Education
RIE	Regional Institute of Education
RISM	Regional Institutes' Students Meet
RMSA	Rashtriya Madhyamik Shiksha Abhiyan
RTE	Right to Education
SA	Summative Assessment
SAP	School Attachment Programme
SBA	School Based Assessment
SC	Scheduled Castes
SCC	State Coordination Committee
SCERT	State Council of Educational Research and Training
SDG	Sustainable Development Goals
SHP	School Health Programme
SIE	State Institute of Education
SIET	State Institute of Educational Technology
SLSMEE	State Level Science, Mathematics and Environment Exhibition
SMC	School Management Committee
SMDC	School Management and Development Committee
SOPT	Special Orientation Programme for School Teachers
SPC	Student Police Cadet

SPD	Sensory Processing Disorder
SPMC	Screening-cum-Progress Monitoring Committee
SRG	State Resource Group
SSA	Sarva Shiksha Abhiyan
SSK	Secondary Science Kit
ST	Scheduled Tribe
STC	Special Training Center
SWAYAM	Study Webs of Active-Learning for Young Aspiring Minds
TGT	Trained Graduate Teacher
TLM	Teaching Learning Material
TNA	Training Needs Analysis
TPCK	Technological Pedagogical Content Knowledge
TVET	Technical and Vocational Education and Training
UGC	University Grants Commission
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNEVOC	UNESCO International Centre for Technical and Vocational Education and Training
UNICEF	United Nations International Children's Emergency Fund
USOL	University School of Open Learning
UT	Union Territory
VE	Vocational Education
VET	Vocational Education and Training
VTTE	Voices of Teachers and Teachers Educators
WWC	Working with Community

Contents

<i>Foreword</i>	<i>iii</i>
1. Overview	1
2. Major Publications	43
3. Research Studies	51
4. Development Activities	77
5. Capacity Building Programmes	103
6. Extension Activities	131
7. Major Schemes of MHRD Co-ordinated by the NCERT	155
8. Visitors to the NCERT and Foreign Visits by the NCERT Faculty	169
9. Appendices	179–268
I Publications and Presentations by the NCERT Faculty	180
II Ph.D. Degrees Awarded during the year under the Supervision of the NCERT Faculty	195
III Awards and Fellowships	196
IV Details of the NCERT Committees, as Mentioned in MoA, for the year 2018–19	200
V NCERT's Consolidated Sanctioned Strength of Posts as on 31 March, 2019 and Reservation Position	240
VI Receipts and Payments Account for the year ended 31 March, 2019	241
VII Publications Released during the year 2018–2019	249
VIII Publication Division and its Regional Production-cum-Distribution Centres	259
IX NCERT Constituents and Faculty	260

‘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 27, July 1961. It formally began its work on 1, September 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, Mysuru, 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 a one-year P.G. Diploma Course in Guidance and Counselling at NIE and RIEs. Short term in-service teacher training programmes are also organised to acquaint teachers with the latest developments in their respective fields. NCERT provides a platform for encouraging excellence and innovation in children. 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. It has worked for popularisation of science education, social science education, population education, environmental education, non-formal education, education of disadvantaged and marginalized 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 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), *Rashtriya Madhyamik Shiksha Abhiyan* (RMSA) 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 classes 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.

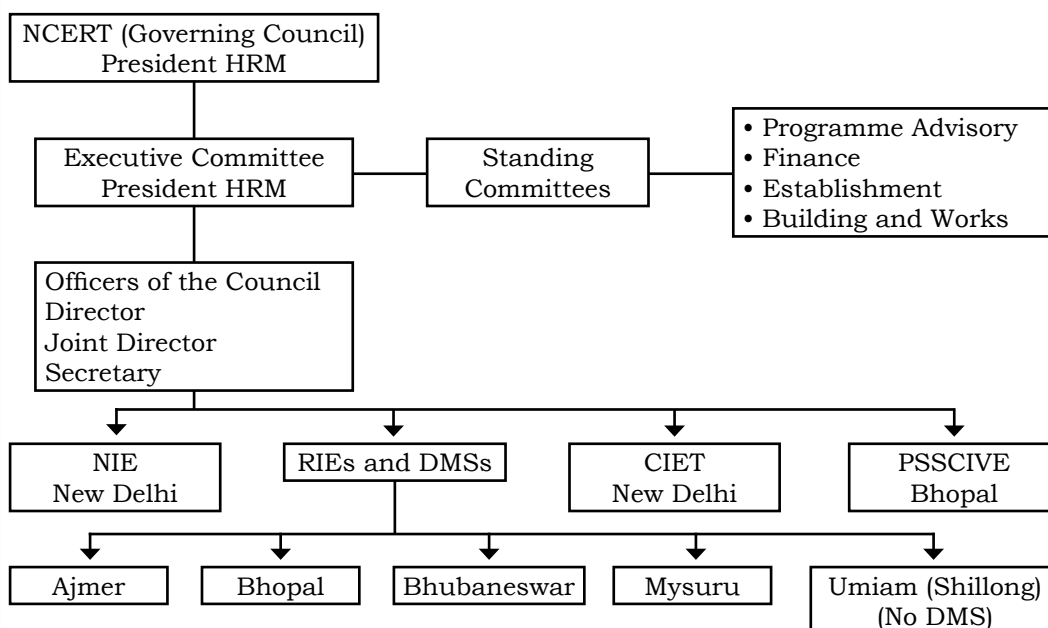
Some other major initiatives of NCERT in recent years include: Review of textbooks developed by NCERT based on *NCF 2005*; digitalisation of education through the development of e-Textbooks and introduction of QR Code in textbooks, audio-video programmes, interactive multimedia programmes, e-Content material in all the areas of school and teacher education, ICT curriculum for teachers and students from Classes VI to VIII and National Repository of Open Educational Resources; starting of Massive Open and Online Course (MOOCs) for school education system in 12 subject areas for classes IX–XII, etc. The Council developed and disseminated on-line Performance Indicators (PINDICS) for Self Assessment of teachers at elementary level and Learning Outcomes at elementary and secondary level. Post National Achievement Survey interventions based on the NAS findings for the quality improvement in school education was another initiative of NCERT. In order to support inclusive education, the Council started preparing tactile books for the visually impaired students. Keeping in view the importance of vocational education, the Council developed competency based curriculum for vocational courses based on National Skills Qualification Framework (NSQF) and textbooks for vocational courses. In the area of pre-primary primary education, the Council developed preschool curriculum and started Early Literacy Programme and Early School Mathematics Programme to enhance literacy and numeracy in early grades (I and II).

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, Planning Commission, 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



Prakash Javadekar, Minister of HRD addressing the members of 104th Meeting of Executive Committee of NCERT

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 Departments of the NIE

Meetings

During 2018–19, 136th, 137th and 138th Finance Committee meetings were held at Shastri Bhawan, New Delhi on 18 April, 2018, at NIE, New Delhi on 21 June, 2018 and at NIE, New Delhi on 16 August, 2018 respectively. A special meeting of the Finance Committee was held at Shastri Bhawan, New



55th Meeting of the General Council of NCERT

Delhi on 30 October 2018. The 104th, 105th and 106th Executive Committees were held at Vigyan Bhawan, New Delhi on 11 April 2018, 25 April 2018 and 5 January 2019 respectively. The 55th and 56th General Council of NCERT were held at Vigyan Bhawan, New Delhi on 11 April 2018 and 5 January, 2019.

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, New Delhi; the Dean (Co-ordination) coordinates the research, development, training and extension activities of the different constituent of NCERT.



Senior Functionaries of the NCERT 2018-19

Director	Hrushikesh Senapaty
Joint Director	-
Secretary	Harsh Kumar
Joint Director (CIET)	Amarendra Prasad Behera
Joint Director (PSSCIVE)	Rajesh P. Khambayat
Dean (Academic)	Saroj Bala Yadav
Dean (Research)	A.K. Srivastava
Dean (Coordination)	Sridhar Srivastava

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 Departmental Advisory Boards (DABs) of the individual departments and thereafter by the Academic Committee (AC) of the NIE. Programmes of the CIET and PSSCIVE are processed through their respective Institute Advisory Boards (IABs). 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.

Constituent Units of NCERT

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

1. National Institute of Education (NIE), New Delhi
2. Central Institute of Educational Technology (CIET), New Delhi
3. Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal



4. Regional Institute of Education (RIE), Ajmer
5. Regional Institute of Education (RIE), Bhopal
6. Regional Institute of Education (RIE), Bhubaneswar
7. Regional Institute of Education (RIE), Mysuru
8. North-East Regional Institute of Education (NERIE), Umiam, (Meghalaya)

I. National Institute of Education (NIE)

The National Institute of Education (NIE) in New Delhi undertakes research and developmental 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) has been working for school education in the areas of science, mathematics, computer science and environment. DESM is responsible for carrying out research, development of textbooks and other teaching-learning materials including e-Resources, training programmes for teachers and teacher educators, evaluation and extension activities in science, mathematics and environment education.

The department updated all the textbooks in science and mathematics, developed an online course for teachers teaching science at upper primary stage and guidelines for Higher Education Institutes for mentoring of schools under *Rashtriya Avishkar Abhiyan*. The department contributed significantly in the development of e-Resources in science and mathematics at upper primary and secondary stage and in physics, chemistry, biology and mathematics at higher secondary stage. Many of these e-Resources have been mapped to the textbooks in science and mathematics for Classes VI–XII.

Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children is one of the major activities of the department. It is a culmination of a series of science exhibitions organised in all States and Union Territories of the country. Extension activities in the areas of science and mathematics education also include organisation of conferences, seminars and celebration of events such as Science Day, Environment Day and Mathematics Week. Science Park and Herbal Garden established by the department have successfully created a wide awareness of and learning beyond classroom. A Quarterly Journal, '*School Science*' is published by the department which gives platform for publishing articles, innovations and experiences in teaching learning of science and mathematics education. The Resource Centre for Science and Mathematics Education (RCSME) of the department collects



and disseminates the information on all aspects of science, mathematics and environment education.

The department also assists and advises Ministry of Human Resource Development, Government of India. It extends cooperation and expertise to all the constituents of NCERT, SCERTs, State Boards of School Education and other State agencies in matters related to science, mathematics and environment education.

2. DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

The department was established on 1 September, 1995 and is working 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 the socially disadvantaged and the persons with disability. The department hosts Minority Cell with a view to focus on promotion of education and welfare of minorities. The key functions of the department are to:

- ❑ carry out researches to review the existing activities and suggest new initiatives in the field of education of persons with disabilities and those belonging to Scheduled Castes, Scheduled Tribes and Minorities;
- ❑ organise training programmes for teachers, teacher educators and policy makers for sensitising and training them in strategies for providing quality education and equal educational opportunities to children belonging to the vulnerable groups;
- ❑ support the development of inclusive curriculum at the national and state level and suggest reforms in the examination procedures from the perspective of Groups with Special Needs;
- ❑ develop teaching learning materials, teachers' guides, manuals, index for inclusion, training guidelines and resource support to the Centre, States, NGOs, national and international level agencies for inclusion of CwD and Children belonging to Socially Disadvantaged Groups in education; and
- ❑ network and draw linkages between various departments, organisations and people involved in the education of special focus groups and provide resource support.

3. DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

The department, with its major thrust in the areas of educational psychology, guidance and counselling, has been engaged in realising the NCERT's objectives of bringing about qualitative improvement in school education and teacher education through the application of psychological knowledge to educational theory and practice. The department extends its resources and collaborates in providing psychological perspectives to different aspects of school education, viz. curriculum planning, textbook writing, teacher training, assessment, etc.

In the field of education psychology, the research component of the department attempts to address the psychological needs/issues/concerns of school students and the teachers. The department has also developed



an Aptitude Test, called Know Your Aptitude (KYA), for school students. Development of psychology textbooks for higher secondary stage has been one of the important concerns of the department. Keeping in view the changing perspectives and guidelines provided in the National Curriculum Framework (2005), the psychology syllabi and textbooks have been made more life oriented and experiential rather than purely theoretical and experimental. The department has been organising training programmes for teacher educators in identifying and nurturing creative potential, learning and development and behaviour modification covering different regions. Seminars/national workshops on researches in child and adolescent psychology; learning problems of children; issues in psychological testing; psycho-educational assessment; Indian psychological traditions, optimising role of psychology in school education, etc. were also organised.

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. The present course was developed in collaboration with Commonwealth of Learning (COL) and is now offered by NCERT as a one-year course. The department 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 this area.

The work on value education is relatively of recent origin in the department. Report on the 21st Parliamentary Standing Committee, forwarded by the MHRD for implementation to the NCERT during the year 2000, had put forward the agenda for value education. The “Value Education in Schools – A Framework” has been developed by the department. It stresses the need to enrich teacher education so that teachers have orientation and competence for promoting education for values. The department’s initiative to offer in-service training to teachers across the country was a step in this direction. It emphasises attaining holistic aims of education which is to foster values of democracy, equality, justice, freedom, concern for others’ well-being, respect for human dignity, rights and so on.

The department also performs dissemination functions through its Resource Centers—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

The programmes and activities of the Department of Teacher Education (DTE) focus on research, development of materials, capacity building of teachers and teacher educators, academic support to the centrally sponsored institutions of teacher education like DIETs, SCERTs, CTEs and IASEs; promotion of innovations and experimentations in teacher education and school education and organisation of extension programmes.

As a ‘think tank’ in the area of teacher education and pedagogy the department is involved in the review/renewal of pre-service teacher programmes at different levels and formulation of models and designs of in-service



education, continuing education and lifelong education of the teachers and teacher educators.

The department adopts and assists SCERTs, SIEs, DIETs, for developing them as professional institutions in the States/UTs/Districts dealing with all aspects of school education and teacher education. It also promotes innovations and experimentations in the field of school education and teacher education. The department organises in-service and continuing education programmes of varied duration for teacher educators/master trainers/Key Resource Persons (KRPs) at different levels utilising emerging Information and Communication Technologies (ICT) and facilities of EDUSAT.

It also undertakes policy research or studies, interdisciplinary 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 practice teaching school/professional experience programme and pedagogy, etc. Besides, it also develops materials highlighting new approaches of teaching-learning, pedagogy and teachers' training as highlighted in NCF 2005, NCFTE 2009, RTE Act 2009, Justice Verma Commission 2012 Report, and NCTE Regulation 2014.

5. DEPARTMENT OF ELEMENTARY EDUCATION

Department of Elementary Education (DEE) of NCERT advises the Government of India on policies and programmes in the area of elementary education. The department has also been working to address the issue and concerns of quality of education at the elementary stage under *Samagra Shiksha* and carrying out various activities to strengthen and support the implementation of RTE Act, 2009 across the country. Broadly, the major focus areas of the department under elementary education are Integrated School Mathematics Programme (ISMP), Integrated School Language Programme (ISLP), Out of School Children, Continuous and Comprehensive Evaluation (CCE) and Preschool Education. Significant inputs and interventions have regularly been provided in these areas through research, material development, training and extension activities.

6. DEPARTMENT OF EDUCATION IN LANGUAGES

The Department of Education in Languages, established in 2005, works in the area of language education at all stages of school education. The major role of the department is implementation of NCF 2005 in respect of syllabi and pedagogy. The department keeps abreast of the recent developments in language education. Keeping in mind the diversity in school education, the department provides academic inputs to States and UTs based on the innovative principles of language education.

The research, development, training and extension programmes are carried out for all stages of school education. The department has developed curriculum, syllabi, textual and supplementary materials in Hindi, English, Urdu and Sanskrit. Training packages for teachers and teacher educators (under SSA and RMSA) are developed for their capacity building. The online course in Urdu and e-Content and Quick Response codes are also been developed for the benefit of learners and teachers.



The department attributes lot of importance to Research in Language Education. Research Studies on the implementation of NCF have been carried out in all the four languages— Hindi, English, Urdu and Sanskrit. The department has contributed in the programme on Rationalisation of Curriculum and syllabi from the perspective of language education and review of textbooks of some States and UTs.

7. DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

Department of Education in Social Sciences promotes quality improvement in curricular areas of social sciences in the disciplinary areas of history, geography, economics, political science, sociology and commerce. The department envisions carrying out research studies to assess the impact of epistemic changes in social science and commerce textbooks based on NCF 2005. In the current academic year the department prepared materials for QR codes in all subjects from upper primary to senior secondary stages. The Learning Outcomes along with pedagogical processes in social sciences at the secondary stage was prepared by the department. The department has contributed in developing textbooks in health and physical education, curricular materials for differently abled learners and continued to contribute in finalising trilingual dictionaries (English, Hindi and Urdu) in the domain of political science. National level competitions among students to promote yoga and generate awareness about adolescent issues through role play and folk dance were organised. In order to strengthen the Union Government's digital initiative, e-Learning materials were developed in different content areas to conduct MOOCs. The National Population Education Project (NPEP) is housed in the department as an independent cell to promote population education and adolescence education in schools and teacher education institutions in India.

8. DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

Department of Education in Arts and Aesthetics was created as a separate department on 24 November, 2005 with the vision 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 main functions of the department are to:

- ❑ conduct research studies in various areas of arts education in school as well as teacher-education;
- ❑ prepare 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;
- ❑ conduct capacity building programmes for in-service teachers, teacher-educators of different levels and stages in art education;
- ❑ review and develop the curriculum and syllabus periodically;
- ❑ integrate art education across the entire school curriculum to provide children with joyful and experiential learning in all school subjects;



- ❑ evolve and conduct pre-service teacher education courses in arts education; and
- ❑ develop a strong network with various national, international, regional, government and non-government organisations which actively involved in the area of art education.

9. DEPARTMENT OF GENDER STUDIES

The Department of Gender Studies (DGS) was created as a Women's Education Unit in 1979. In 1989 it was upgraded to a full-fledged Department of Women's Studies to address the issues of girls' education and women's empowerment more intensively. The department was renamed as Department of Gender Studies in the light of the landmark judgment of the Supreme of Court of India in 2014 for acknowledging transgender as 'third gender' and addressing their concerns.

The major roles and functions of the Department of Gender Studies are to provide suitable intervention in policy planning and implementation; create awareness among educational personnel on elimination of gender bias and stereotyping; revision of curricular material and textbooks from the view point of gender equality; development of gender inclusive modules and exemplar materials for teacher educators and teachers; work towards bringing positive societal change in favour of the girl child and transgender and enable them to attain their full potential; carrying out of evaluation studies for centrally sponsored schemes and programmes related to girls' education and their overall development; community mobilisation; preparation of online course and motivational materials; training of teacher educators and provide inputs into pre-service and in-service education of teachers for promoting gender sensitisation among practitioners.

The department plans and implements research, development, training and extension activities in accordance with the role and functions of the department. Earlier the department played a crucial role in the formulation and implementation of the National Policy on Education (NPE) 1986 and its Programme of Action (POA) 1992. The department was actively involved in the preparation of the CAGE Committee Report on Girls' Education and Common School System and contributed significantly in the preparation of Position Paper on *Gender Issues in Education 2006*. Inputs were given in the preparation of various Five Year Plans from the point of view of girls' education and empowerment. Suitable inputs were also provided for various other policies and schemes such as *Sarva Siksha Abhiyan* (SSA), *Rashtriya Madhyamik Siksha Abhiyan* (RMSA), *Kasturba Gandhi Balika Vidyalyaya* (KGBV) Scheme, National Policy on Skill Development, National Policy for Women Empowerment, Scheme for Vocationalisation of Secondary Education and *Samagraha Siksha Abhiyan*. In the context of making schooling process infused with principles of equity, equality and quality, the department plays a critical role during the formulation of various National Curriculum Frameworks.

More recently, the department contributed to the preparation of learning outcomes at elementary level, MOOCs platform, textbook revision exercise, facilitated states to make the textbooks gender inclusive, integrated scheme



on school education (*Samgraha Siksha Abhiyan*), strategic action plan for girls' education and development of health and wellness curriculum, development of syllabus for paper on gender issues in education one each for elementary and secondary stage to be offered for integrated B.Ed. course, etc.

Besides, the department has been organising gender sensitisation programmes since its inception as mandated by the POA, 1992. The department conducted training programmes for KGBV teachers on Bridge Courses for KGBV girls and Teacher Training Packages for KGBV teachers developed by the department. Moreover, training programmes on methodology of women's education for the duration of six weeks and action research with gender perspective were conducted by the department. The department has prepared training materials for teacher educators on gender equality and empowerment in three volumes viz., Volume I. Perspectives on Gender and Society, Volume II. Gender and Schooling Process, and Volume III. Gender and Women's Empowerment. Promotional material in the form of messages and posters that can help in creating and enabling environment for gender inclusion, syllabus for Classes XI and XII and textbooks of Class XI for *Human Ecology and Family Sciences (HEFS)*, modules for integrating gender in content and process of education for teacher educators and teachers for the RMSA Scheme, bridge courses for KGBV girls and teacher training package for KGBV teachers and a documentary on achievements of Women with Disability titled '*Badhte Kadam*'.

10. DIVISION OF EDUCATIONAL RESEARCH

Division of Educational Research 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). A standing committee of NCERT, ERIC, acts as a catalyst to promote and support research in priority areas of school education 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 institutions. Another new scheme 'NCERT Research Associateship (Educationists'/Researchers' Pool)' provides opportunities to young educationists/educational researchers, who have done their Ph.D. on topics relating to school education but have still not got regular jobs, provides a chance to contribute and gain experience in their relevant areas pertaining to school education. NCERT, in particular, and the education system in India as a whole, will also gain from the energies, enthusiasm and knowledge of these young people.

11. EDUCATIONAL SURVEY DIVISION

Educational Survey Division is created in 2012 merging two erstwhile departments 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 functions of the Division are to:

- ❑ create, maintain and update periodically the educational database at the national level;
- ❑ provide training in quantitative research methods using statistical package;
- ❑ provide central facility for statistical analysis of data pertaining to large-scale surveys/studies/projects conducted by the different constituents of the NCERT;
- ❑ building capacity of state resource persons in conducting educational surveys and evaluation issues relating to school education;
- ❑ develop conceptual material in educational evaluation for the use of teacher educators, in-service teachers, pre-service teachers and resource persons;
- ❑ undertake research in the areas pertaining to learning assessment; and
- ❑ conduct National Talent Search Examination (NTSE) as a special testing programme to identify talent.

12. DIVISION OF EDUCATIONAL KITS

Division of Educational Kits (DEK), previously known as NIE Workshop, was conceived in 1964 to provide academic assistance for designing and development of science equipment. The main objectives are to study teaching equipments in science and mathematics and to design, develop; make experimental trials in schools for testing the designs and production.

Since then, it has been one of the important departments and divisions of NIE, NCERT 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 equipments 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 also imparts training in plastic processing and various other trades. It conducts various extension activities viz., hands-on-activities in science, mathematics and technology for children, participation in annual Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children, World Book Fairs, World Trade Fair, and Global Education Summits.

Recognising that constructive hands-on experience holds the key to understanding and meaningful education, the focus of development efforts in DEK has been on activities that promise to motivate the child to have meaningful educational experience. This is achieved by directing its R&D activities that lead to enabling the child to explore the concepts and draw meaningful conclusions through thematic kits. DEK acts as a model division for prototype kit design and development, production centre and a path-setter in the shifting paradigm of educational practices and imparting hands-on training to teachers/students/teacher educators on the use and development of educational kits. It's a vital source of educational kits for all levels of school education.

13. PLANNING AND MONITORING DIVISION

Planning and Monitoring Division (PMD) was created with the purpose of coordinating the process of programme formulation, monitoring, evaluation



and submitting periodic reports of programmes 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 issues proper guidelines for the implementation of its various programmes. To achieve its objectives, PMD issues guidelines, prepares various documents for dissemination of information, monitors the progress of programmes approved by Programme Advisory Committee (PAC) and Project Approval Board (PAB).

While providing support to the Constituents of NCERT in formulating short-term and long-term academic programmes and evaluating its implementation and assessing progress, PMD has been engaged in the following activities:

- ❑ Preparation of Annual Report of NCERT;
- ❑ Preparation of NCERT component for the Annual Report of MHRD;
- ❑ Preparation, development and updating of general guidelines for formulation of academic programmes;
- ❑ Preparation of time schedule and participation in the meeting of programme processing committees: Departmental Advisory Boards, Academic Committee, Institute Advisory Boards and Management Committees;
- ❑ Convening Programme Advisory Committee meetings;
- ❑ Quarterly monitoring of the progress of programme implementation undertaken by the Institutes/Departments/Divisions/Cells; collection and processing of information through follow up actions;
- ❑ Preparation of action taken report on Human Rights recommendations for MHRD;
- ❑ Preparation of Annual Programme Budget of NCERT;
- ❑ Processing of proposals of PAC and PAB approved programmes for administrative-cum-financial sanctions;
- ❑ Preparation of monthly and quarterly reports on major activities and achievements of NCERT;
- ❑ Preparation of MoU of NCERT with Ministry of HRD;
- ❑ 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; and
- ❑ Coordination of projects approved by Project Approval Board (PAB) of Ministry of Human Resource Development under *Samagra Shiksha*—Integrated Scheme.

Apart from these regular activities, PMD is also engaged in carrying out research, development, training and extension programmes in different areas of school and teacher education.

14. RMSA PROJECT CELL

Rashtriya Madhyamik Shiksha Abhiyaan (RMSA) was launched in 2009 by the Ministry of Human Resource Development (MHRD) India with a goal of providing quality secondary education to all students as a next step after achieving substantial retention under *Sarva Shiksha Abhiyaan* (SSA).

The RMSA framework is built around concerns of universal access to quality education at the secondary school stage. Universal access in RMSA has been



seen in not only physical terms, but also is envisaged in physical, social, cultural and economic terms which are interwoven in a common concept of inclusion.

RMSA Project Cell of NCERT plays a crucial role in providing quality secondary education as resource organisation. It is under this backdrop, the NCERT has been making considerable efforts towards providing quality education (embedded with equity concerns) at the secondary stage, 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. These endeavours have been undertaken by RMSA Project Cell of NCERT.

15. INTERNATIONAL RELATIONS DIVISION

International Relations Division (IRD) carries out various activities in conformity with the NCERT's role to promote international cooperation in the field of school education. Broadly, these activities are: (a) Facilitate exchange of information between the NCERT and various agencies and institutions abroad; (b) Facilitate signing of MoUs between the NCERT and such overseas agencies and institutions as are willing to do so and maintain such records; (c) Discharge responsibility as the Academic Secretariat of the National Development Group (NDG) constituted in 1979 by the MHRD under the aegis of the UNESCO's Asia Pacific Program of Educational Innovations for Development (APEID).

As part of these activities, the division hosts visiting delegations from abroad and facilitates consultations and cooperation in the areas of; (i) formulation of national education policies, (ii) development of national curriculum frameworks, (iii) organisation of pre-service and in-service teacher education programmes, (iv) formulation and implementation of programmes for vocational education, and (e) educational technology. Apart from these, the IRD also discharges the NCERT's obligations as an Associated Centre of the APEID by sourcing, compiling and sharing its innovative practices with other Associated Centres. Moreover, the IRD facilitates the participation of faculty from NCERT in international seminars, conferences, meetings, exhibitions and training programmes conducted under the auspicious of international organisations like UNESCO, UNICEF, UNDP, etc.

Based on the experiences of such activities, the IRD, in recent years, has enabled the NCERT to sign MoUs with some noted institutions like Academy of Korean Studies, Republic of Korea, Curtin University, Perth, Australia and Mauritius Institute of Education, Mauritius covering different areas of school education. Besides, the IRD is also carrying the NCERT's initiatives forward to sign MoUs with similar leading educational institutions in the countries such as Bhutan, Nepal, Sri Lanka, Bangladesh, Afghanistan, Germany and Indonesia. The objective behind doing so is to foster structured and meaningful relations with these countries for mutual benefit.

16. DEPARTMENT OF CURRICULUM STUDIES

Department of Curriculum Studies (DCS) has been set up with effect from 5 September, 2016 to look after various aspects of curriculum research



and development. The department engages in generating knowledge base on curriculum practices and textbooks; building capacities of agencies in States and UTs serving in school education on curriculum research and development; developing courses on different aspects of curriculum; developing and disseminating documents to provide academic support to stakeholders on curriculum issues; conducting curriculum research for looking at interconnected knowledge base of curriculum and the mechanisms employed in the process of curriculum development and building a culture of academic inquiry for evolving strategies in the process of curriculum development. In view of departmental vision, roles and concerns, the department is working towards bringing out a course on curriculum design, handbook of textbook development and also a research paper on Curriculum Reform in India.

17. HINDI CELL

With the enforcement of the Constitution on 26 January, 1950, Hindi became the Official Language of the Union of India according to Article 343 of the Constitution. The Government of India was entrusted with the responsibility of the promotion of the status of Hindi. Consequent upon the enactment of The Official Language Act, 1963, Ministry of Home Affairs, Government of India continuously issues orders to use Hindi as the Official Language. After the formulation of Hindi as the Official Language, the Official Language Rules 1976 were enacted. Keeping in view the promotion and proper implementation of as official language hindi in day-to-day functioning of the Council, Hindi Cell was constituted in the Council Headquarters.

In order to implement these rules, Hindi Cell makes all efforts to follow the orders, rules and resolutions issued by the Department of Official Language, Ministry of Home Affairs for the promotion of Hindi Language. The Cell also ensures compliance of these orders, instructions, etc., from time to time in administrative works of the Council.

18. 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 or monographs and educational journals. For adoption or adaptation and translation of NCERT books by various States and UTs, copyright permission is granted by NCERT on the request of States and UTs under the nationalised textbook programme. These 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.

Grant of Copyright for Adoption or Adaptation or Translation to Various States and UTs

The NCERT granted copyright of its textbooks to the mentioned States and UTs, based on their request, for adoption or adaptation or translation for the year 2018–2019.



Copyright Permission for the Year 2018–19

S. No.	State		Agency	Classes for which Copyright Obtained
1.	Bihar	-	Bihar State Textbook Corporation Publishing Ltd. Patna, Bihar	IX–XII
2.	Chhattisgarh	-	Ati. Sanchalk, SCERT, Raipur, Chhattisgarh	VI–VIII and XI–XII
3.	Delhi	-	Secretary, Delhi Bureau of Textbooks (DBTB), Janakpuri, Delhi	I–VIII
4.	Gujarat	-	Director, Gujarat School Board of Textbooks, Gujarat	I–VIII, IX and XI
5.	Goa	i.	Board of Secondary and Higher Secondary Education, Alto Betim, Goa	IX–XII
		ii.	SCERT, Goa	I–VIII
6.	Himachal Pradesh	-	Himachal Pradesh Board of School Education, Dharamshala, H.P.	VI–XII
7.	Haryana	i.	Sahayak Sachiv (Shaikshik), Haryana Vidyalaya Shiksha Board, Bhivani, Haryana	IX–XII
		ii.	Assistant Director, (Academic Cell) Elementary Education, Panchkula, Haryana	I–VIII
8.	Karnataka	i.	Managing Director, Karnataka Textbook Society, Deptt. of Public Instruction Bengaluru, Karnataka	VI–VIII and X
		ii.	Director, Department of Pre-University of Education, Govt. of Karnataka, Bengaluru	XII
9.	Kerala	-	Director, SCERT, Poojapura, Kerala	XI – XII (Textbook) XI (Vocational Education 12 Books)
10.	Mizoram	-	Commissioner and Secretary, Govt. of Mizoram, School Education Department, Khatla, Aizawl – 796 001 (Mizoram)	I–VIII
11.	Manipur	i.	Secretary, Council of Higher Secondary Education, Imphal, Manipur	XI–XII
		ii.	Director, SCERT, Imphal, Manipur	I–VIII
12.	Madhya Pradesh	-	Rajya Shiksha Kendra, Bhopal, M.P.	I–XII



13.	Nagaland	i.	Chairman, Nagaland Board of School Education, Kohima, Nagaland	IX–XII
		ii.	Director, SCERT, Kohima, Nagaland	VI–VIII (English, Maths and Science)
14.	Punjab	i.	Secretary, Punjab School Education Board, Mohali, Punjab	VI–XII
		ii.	Secretary, Punjab Urdu Academy, Delhi Gate, Malerkotla, Punjab	I–XII (Urdu)
15.	Rajasthan	-	Rajasthan Rajya Pathyapustak Mandal, Jaipur, Rajasthan	I–VIII (Urdu)
16.	Tripura		SCERT, Abhoynagar, Agartala, Tripura	I–XII
17.	Uttar Pradesh	i.	Sachiv, Madhyamik Shiksha Parishad, Allahabad, Uttar Pradesh	IX–XII
		ii.	Shiksha Nideshak (Basic) Uttar Pradesh, Lucknow, Uttar Pradesh	I–V (only English language)
18.	Uttarakhand	-	Madhyamik Shiksha Uttarakhand, Dehradun	I–XII
19.	Assam	-	Assam Higher Secondary Education, Guwahati	XI–XII

In total, 26 agencies of 19 States and UTs have obtained copyright permission in 2018–19.

All the above States and UTs have obtained copyright for NCERT textbooks published under NCF 2005 constituting a significant portion of the student community. During the year under report, 549 publications were released. The number of journals brought out during 2018–19 are as follows :

Quarterly Journals

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

Half-yearly Journal

- ❑ *Indian Educational Review*

Online Journal

- ❑ *Voice of Teachers and Teacher Educator*

To ensure the availability of NCERT publications across the country, NCERT has empanelled 895 dedicated booksellers as its vendors. The Urdu Academy, Government. of NCT Delhi has been appointed as distributor for NCERT's Urdu publications. A dedicated web portal launched by Hon'ble Minister of State is being used for strengthening the distribution network of NCERT publications.



With the help of CBSE all the affiliated schools were informed to upload their requirement of NCERT textbooks for the forthcoming academic session in order to prepare the print order of NCERT textbooks. Schools have the option either to collect their requirement of NCERT textbooks from any other empanelled vendor or directly from NCERT as per their convenience.

NCERT web portal also extend the facility to online order for NCERT publications to individuals, students, parents and institutions. The orders so received at NCERT web portal are delivered through registered book post at the customers' door-step.

Various educational institutions, government. agencies, school organisations such as *Navodaya Vidyalaya Samiti*, Amity Group of Schools, Model Schools of different states, Government of Arunachal Pradesh, Sikkim and Gujarat are procuring NCERT textbooks directly from Publication Division, NCERT.

Besides textbooks, Publication Division, NCERT published several titles under the category of 'Teachers Guide', 'Research Monographs', 'Supplementary Reading Materials and 'Books on Vocational Courses'. These publications are also mailed as per the approved mailing list.

Regional Production-cum-Distribution Centres located at Kolkata, Bengaluru, Ahmedabad and Guwahati are catering to the needs of publications in Eastern, Southern, Western and North-East parts of country respectively. The Delhi Head Quarter is catering to the requirement of North India. A total number of 10 NCERT Sales Counters operated by NCERT, Publication Division are functional throughout the year at four RPDCs, five Regional Institutes of Education and at Delhi Head Quarter to facilitate the availability of NCERT publications to individuals, students, parents and schools.

Publication Division, NCERT has participated in various book fairs and exhibitions during the year 2018–19 as detailed below.

S. No.	Name of the Book Fair and Exhibition	During the Period	Place at Book Fair
1.	Delhi Book Fair 2018	25 August, 2018 to 02 September, 2018	Pragati Maidan, New Delhi
2.	Jawaharlal Nehru National Science Mathematics and Environment Exhibition	23 November, 2018 to 28 November, 2018	Ahmedabad
3.	World Book Fair 2019	05 January, 2019 to 13 January, 2019	Pragati Maidan, New Delhi
4.	International Kolkata Book Fair 2018	30 January, 2019 to 10 February, 2019	Kolkata
5.	DIDAC INDIA 2018	04 November, 2018 to 06 November, 2018	Pragati Maidan, New Delhi
6.	11th Vishwa Hindi Sammelan 2018	18 August, 2018 to 20 August, 2018	Mauritius

19. 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 interdisciplinary 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 main functions of Library and Documentation Division (LDD) are to:

- ❑ collect, organise and disseminate primary, secondary and tertiary resources on school education and also on teacher education;
- ❑ support academics, researchers and students through conventional references, referral services and document delivery services;
- ❑ facilitate in-service education of library personnel of States and UTs and other organisations by using manuals;
- ❑ disseminate bibliographies, book reviews, current contents indexing and abstracting of articles and press clipping;
- ❑ disseminate LDD products and services through extension services;
- ❑ facilitate the readers resource sharing through DELNET, and
- ❑ provide free internet surfing to the readers.

The vision of 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.

MAJOR ACTIVITIES

Acquisitions, Expenditure, Manuscripts during 2018–19

1.	Acquisitions	
A.	Books purchased 2018–19 (131932–132266)	335
B.	Books received as gift 2018–19 (F 32011–F 32210)	200
C.	Bound journals accessioned (J-20505-J21093)	589
D.	Withdrawn books	07
2.	Expenditure on Books, Journals, Binding and PAC Programme	
A.	On books	5,48,661/-
B.	On periodicals, journals and other magazines	82,62,450/-
C.	On stationery	Nil
D.	On binding (Journals and Books)	35,114/-
E.	On PAC programme	3,02,865/-
	Total	91,49,090/-
3.	Resource Generated by LDD and deposited in the A/C section	
	• Photocopy charges	16,848/-
	• Renewal charges— Institutional membership	4,000/-
	• Security money— External Membership (New)	8,000/-
	• Lost books (with 25% surcharge)	8,736/-
	• Overdue charges	7,824/-
	• Loss of library I-card	Nil
	• Raddi	13,300/-
	Total	58,708/-



4.	Journals Subscribed	
	• Foreign journals	121
	• Online database (J STOR 1; DELNET 1)	02
	• Online journals	46
	• Indian journals	31
	• NCERT journals	08
	• Magazines (English 11, Hindi 08)	19
	• Newspapers (Hindi 06, Urdu 01, Punjabi 01, English 10)	18
5.	Documentation and Information Services	
A.	Information Products	
	• Current contents	12
	• New arrivals on display	12
	• Book reviews	12
	• Press clippings	12
B.	Photocopying Service	
	• For official purpose (No. of pages)	13743
6.	Circulation Services	
A.	Membership as on 31/3/2018	1577
B.	Membership enrolled during 2018–19 is as follows:	-
	• NCERT employees	16
	• Special (NCERT Retired Staff)	Nil
	• External (Paid)	04
	• JPF and other contractual	24
	Total Membership	1621
	Memberships discontinued during 2018–19 (Due to superannuation or completion of projects) NCERT Emp. 17, Ext. Memb-05, JPF-24	46
	Total Membership as on 31/03/2019	1575
C.	No Dues certificate issued	316
D.	External readership who availed consultation (References facility during 2018–19)	626
E.	Total number of books issued during 2018–19	1039
F.	Total number of books returned during 2018–19	1109
G.	Books issued on inter library loan during 2018–19	325
H.	Books borrowed on inter library loan during 2018–19	56

II. Central Institute of Educational Technology (CIET)

Central Institute of Educational Technology (CIET), a constituent unit of NCERT, came into existence in the year 1984 merging Center for Educational Technology and Department of Teaching Aids. CIET is a premiere national level institute of educational technology. Its major aim is to promote utilisation of educational technologies, viz., radio, TV, films, satellite communications and



cyber media either separately or in combinations. The institute undertakes activities to widen educational opportunities, promote equity and improve quality of educational processes at school level. CIET creates audio, video and multimedia resources for school and teacher education. It also undertakes research, developmental activities, training and extension works in the field of educational technology for school and teacher education. The institute has four major divisions namely: Department of Information and Communication Technology (DICT) and Training, Planning and Research Division (PRD), Media Production Division (MPD) and Engineering Division (ED).

DICT is instrumental in creation of multimedia materials for students and teachers, imparting training on the use of ICTs in teaching-learning process and research methodology for ICTs in education, etc., for teachers and teacher educators. It also organises faculty training on usages of ICTs in education including Web Tools, portals and Mobile apps Wiki/ WikiEducator, Maclabs and Robotino, development and use of open source materials, etc. Capacity building of State Resource Groups (SRGs) in State and UTs on ICTs in education is also another mandate of the department. It also facilitates innovations in ICTs in education and their dissemination. Extension of ICT resources among schools, students and teachers in every part of the country is the motto of the department along with the continuous updating and maintenance of website CIET and NCERT, *epathshala*, NROER, and other web applications. Development of ICT textbooks, interactives, digitisation of NCERT textbooks and developing QR codes for them has been another area where, the department has been working for.

PRD looks after the activities related to planning, conducting and disseminating research. It also is responsible for overseeing the processes for developing new programme proposals, their approval from the bodies like Institutional Advisory Board (IAB) of CIET; Programme Advisory Committee (PAC) of NCERT and Project Advisory Board of Ministry of Human Resource Development (MHRD), GoI and finally ensuring the timely execution and monitoring of the approved programmes besides compiling and sharing the monthly, quarterly and annual reports of academic activities of CIET with NCERT Headquarter.

The primary mandate of the Media Production Division (MPD) is to produce quality educational Audio-Video programmes for various stakeholders students, teachers, parents, etc. The division conducts its programmes with the help of the teams of producers, cameramen, floor managers, floor assistants, lightmen, sound recordists, editors, graphic artists and other similar personnel having the technical know-how of media productions. Once the programs are produced and finalised after undergoing a rigorous preview by experts and other stakeholders, the programmes are out for dissemination through both offline and online modes including telecast on *Kishore Manch*, *SWAYAMA PRABHA*'s channel # 31 of the DTH-TV network and *Gyan Darshan* channels. These programmes are also available on CD/DVD formats for the students, teachers as well as general public.

Engineering Division (ED) has the mandate to equip the institute with the modern and latest technologies to help CIET to achieve its goals and objectives. ED procures equipment as per the requirements and also maintains them.



CIET has the state of the art production facilities and the quality products are produced because of constant upgradation and proper maintenance of the equipments it also provides technical and academic support to RIEs, SIETs, etc.

III. Pandit Sunderlal Sharma Central Institute Of Vocational Education (PSSCIVE), Bhopal

PSS Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent unit of the NCERT, established in 1993 at Shyamla Hills, Bhopal, is a national apex research and development organisation 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 policies and programmes of NSQF and on the vocationalisation of secondary and higher secondary education.

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 strategies to achieve the vision of the institute are to develop learning outcome based modular curricula for NSQF (Class IX to XII); 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; providing employability skills and establishing student support system to ensure better employment opportunities; increase the reach of institute and establish mechanism for quality training to vocational teachers; up-skilling vocational educators improving access, efficiency and equity in vocational education and training at all levels of education; and collecting maintaining and disseminating information and popularise vocational education amongst society at large.

The institute is mandated to develop curricula and courseware for vocational subjects (job roles) for Classes IX to XII in 21 different sectors of the economy like Retail, Automobile, Security, Media and Entertainment, Travel and Tourism, Beauty and Wellness, Agriculture, Health Care, etc. It is mandatory for all states to follow the curricula and courseware developed by the PSSCIVE. The institute is also responsible for training teachers and capacity building of State key functionaries for effective implementation of NSQF.

IV Regional Institutes of Education

The Regional Institutes of Education (RIEs) located at Ajmer, Bhopal, Bhubaneswar, Mysuru, NE-RIE, Umiam 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, Mysuru and NERIE, Umiam. 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. The course-wise enrolment and results are given in the following tables. RIE, Mysuru 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 course.

1. REGIONAL INSTITUTE OF EDUCATION (RIE), AJMER

The Regional College of Education, Ajmer was set up in the year 1963 as one of the constituent units of NCERT. Later it was renamed as Regional Institute of Education, Ajmer in the year 1995. Since its inception the institute has been supporting the educational departments of the States and UTs of Northern



Region in improving the quality of school education through its capacity development programmes of the Key Resource Persons and senior functionaries of education, educational researches, extension activities, etc. The States and UTs under its jurisdiction are Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttarakhand, and Uttar Pradesh, National Capital Territory, Delhi and Union Territory of Chandigarh. The institute is affiliated to the Maharshi Dayanand Saraswati University, Ajmer and its pre-service teacher education programmes are recognised by the NCTE, New Delhi. The institute has been accredited with A+ grade by the NAAC in the year 2017.

The institute offers four year B.A., B.Ed., four year B.Sc., B.Ed., two year B.Ed. and two year M.Ed. programmes. In addition, a Diploma Course in Guidance and Counselling is also offered in face-to-face and online mode for which the diploma certificate is provided by NCERT. The faculty of the institute is also guiding research scholars enrolled for Ph.D. in M.D.S. University in different subjects areas.

2. REGIONAL INSTITUTE OF EDUCATION (RIE), BHOPAL

Regional Institute of Education, Bhopal earlier known as Regional College of Education was inaugurated by K.L. Shrimali, the then Union Minister of Education on 3 May, 1963. It caters to the pre-service and in-service needs pertaining to school education of the Western Region of the country which comprises the States of Madhya Pradesh, Chhattisgarh, Gujarat, Maharashtra, Goa and Union Territories of Daman, Diu and Dadra and Nagar Haveli.

The pre-service education programmes are being offered by the institute are: B.Sc. B.Ed. and B.A. B. Ed. Eight Semester integrated course, two years B.Ed. Course in Science and Math and in Language and Social Science, two Year M.Ed.— Four semester course, Diploma Course in Guidance and Counselling (DCGC) through distance/on-line and face to face mode. (Pre-service and In-service course) and three year B.Ed. M.Ed. Integrated programme started from the session 2018–19. The courses of RIE, Bhopal are affiliated to Barkatullah University, Bhopal. It is also recognised as an institution for doctoral research for Ph.D. work. Facilities for research are available at the institute in the areas of education, science education, mathematics education, social science education, physics, chemistry, mathematics, botany, zoology, geography, english and commerce. Many scholars have been awarded Ph.D. under the guidance of the faculty members of the institute.

3. REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Regional Institute of Education (RIE), Bhubaneswar caters to both pre-service and in-service needs pertaining to school education of Odisha, Bihar, Jharkhand, West Bengal, Sikkim, Manipur, Mizoram, Meghalaya, Arunachal Pradesh, Nagaland, Tripura and Andaman and Nicobar Islands. The institute is running the following regular pre-service programmes are under the affiliation of Utkal University and approval of NCTE— (i) Four-year integrated B.Sc., B.Ed., (ii) Four-year integrated B.A., B.Ed., (iii) Two-year B.Ed., (iv) Two-year M.Ed. and (v) One-year M.Phil. in Education. In addition, a Diploma Course in Guidance and Counseling is offered by the institute on distance-cum-face-



to-face mode. The institute also acts as the nodal centre for Pre-Ph.D. course of Utkal University.

4. REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

The Regional Institute of Education, Mysuru (formerly Regional College of Education) founded on 1 August, 1963, was started with the main objective of qualitative improvement of school education through innovative pre-service and in-service teacher training programmes and relevant research, development and extension activities. The institute has established itself as an institute of repute in the area of school and teacher education. The institute has endeavoured to shoulder the responsibilities and challenges generated by changes in the educational scenario of the country. The pre-service teacher training programmes of the institute are affiliated to the University of Mysuru and cater to the needs of Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Puducherry and Lakshadweep and its post graduate programmes cater to all the states of the country.

The Regional Institute of Education, Mysuru focuses more on in-service teacher education programmes besides experimenting innovative pre-service teacher education programmes on experimental basis. The institute has experimented B.Tech.Ed. for preparing teachers to work in technical schools attached to polytechnics and 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.

5. NORTH-EAST REGIONAL INSTITUTE OF EDUCATION (NE-RIE), UMIAM (MEGHALAYA)

North-East Regional Institute of Education, Umiam, Meghalaya cater to the educational needs of North-Eastern States, which include Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura on the lines of NCERT's mandate. 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 as well as teacher education. Besides B.Ed. course, NERIE offers short-term courses in different areas such as Diploma Course in Guidance and Counselling (DCGC) and Certificate Course in Early Childhood Education.

Course-wise Students' Enrolment in the RIEs during the Session 2018–19

S. No.	Name of the Course	Ajmer	Bhopal	Bhubaneswar	Mysuru	Umiam (Meghalaya)
1.	B.Sc. B.Ed.					
	I Year	96	71	104	78	
	II Year	89	68	95	75	
	III Year	87	70	100	72	
	IV Year	90	74	96	55	



2.	B.Ed. (Secondary)					
	I Year	90	76	50	50	47
	II Year	83	64	49	22	47
3.	B.A. B.Ed.					
	I Year	46	37	50	40	
	II Year	40	33	48	37	
	III Year	42	38	48	39	
	IV Year	47	37	48	39	
4.	M.Ed. (Ele. Edu.)					
	I Year	30		33	4	
	II Year	15		29	7	
	M.Ed. (Secondary)					
	I Year		27			
	II Year		26			
5.	DCGC	47	39	31	16	5
6.	M.Sc. Ed.					
	I Year				48	
	II Year				41	
	III Year				36	
	IV Year				36	
	V Year				35	
	VI Year				33	
7.	B.Ed.					
	I Year					
	II Year					
8.	M. Phil			10		
Total		802	706	791	752	99



RIE Students' Performance in University Examination 2018-19

S.No.	Course	Ajmer		Bhopal		Bhubaneswar		Mysuru		Umiam	
		No. of Students Appeared/ Passed	Pass %	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.Sc.B.Ed./ B.Sc.Ed.										
	I Year Appeared Passed	89/89	100			100/95	95	78/69	88.46		
	II Year Appeared Passed	86/86	100			102/102	100	74/66	89.18		
	III Year Appeared Passed	88/81	92.04			100/100	100	72/53	73.61		
	IV Year Appeared Passed	86/85	98.83	70/58	82.85	101/96	95.1	55/45	81.82		
2.	B.Ed.										
	I Year Appeared Passed	83/83	100			94/93	98.94				
	II Year Appeared Passed	91/90	98.90	71/68	95.77	94/94	100				



Annual Report 2018-2019

3.	M.Ed.(Ele. Edu.)									
	I Year Appeared Passed	15/14	93.33			30/29	96.67			
	II Year Appeared Passed	27/27	100	18/18	100	30/29	96.67			
4.	MSc. Ed.									
	I Year Appeared Passed						46/41	89.13		
	II Year Appeared Passed						36/35	97.22		
	III Year Appeared Passed						40/30	75		
	IV Year Appeared Passed						41/40	97.56		
	V Year Appeared Passed						38/31	81.57		
	VI Year Appeared Passed						28/26	92.85		
5.	DCGC Appeared Passed			39/38	97.43	22/22	100	16/16	100	

6.	B.A. B.Ed./ B. A. Ed.									
	I Year Appeared Passed	41/40	97.56			48/44	91.67	40/28	70	
	II Year Appeared Passed	43/42	97.67			48/48	100	37/27	72.97	
	III Year Appeared Passed	47/46	97.87			48/48	100	39/34	87.17	
	IV Year Appeared Passed			38/38	100	49/49	100	38/38	100	
7.	M. Phil.									
	II Year Appeared Passed					10/10	100			



Annual Report 2018–2019

Demonstration Multipurpose Schools

The Demonstration Multipurpose Schools situated at Ajmer, Bhopal, Bhubaneswar and Mysuru 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 2018–19

S.No.	Class	Ajmer	Bhopal	Bhubaneswar	Mysuru
1.	Pre-Primary	36	50	50	49
2.	I	33	70	69	68
3.	II	35	70	68	68
4.	III	34	71	69	70
5.	IV	35	70	68	69
6.	V	34	70	67	68
7.	VI	70	70	104	70
8.	VII	66	70	105	70
9.	VIII	67	70	100	70
10.	IX	66	70	111	72
11.	X	62	67	96	64
12.	XI	85	104	106	64
13.	XII	75	83	102	53
Total		698	935	1115	855

Results of Board Examination, 2018–19

S. No.	Class	Ajmer		Bhopal		Bhubaneswar		Mysuru	
		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	56/56	100	67/64	95.5	88/88	100	69/68	99
2.	XII Science	24/24	100	33/33	100	67/67	100	30/27	90
3.	XII Humanities/ Social Science	29/29	100	14/13	92.9	06/06	100	24/15	63
4.	XII Commerce	28/25	89.3	33/31	93.03	11/10	91	-	-
5.	XII Vocational	-	-	03/03	100	-	-	-	-



1. DEMONSTRATION MULTIPURPOSE SCHOOL, RIE, AJMER

Demonstration Multipurpose School (DMS) was established in 1964 as a pace setting institution under the control of Regional College of Education (now Regional Institute of Education), Ajmer to try out innovative ideas and experiments for the improvement of the school education in the country. It is a CBSE affiliated co-educational school providing quality education to over 700 students from pre-primary to XII. At the senior secondary level, the options of humanities, science, commerce and vocational streams are available for the students. The school has its separate library, labs, computer room and over 100 Multimedia CD/DVD collections.

Major Achievements of the School

- ❑ Mohit Devra of Class VI, got third position at district level Sanskrit *Shlok Paath* competition organised by *Sanskrit Bharati Sanstha* at Samrat Public School, Ajmer on 4 September 2018.
- ❑ Kanika Aggarwal of Class VII, Khusboo Vaishnav of Class VII, Kanika Sharma of Class VII, Divyanshi Chouhan of Class VII, Rashma Meena of Class XI, Purnima Panchauli of Class XII, Meenakshi Meena of Class XII and Laveena of Class XI participated at district level singing competition organised by Bhart Vikas Parishad on 8 September 2018 and got first prize in the competition.
- ❑ Kanika Aggarwal of Class VII, Khusboo Vaishnav of Class VII, Kanika Sharma of class VII, Divyanshi Chouhan of Class VII, Rashma Meena of Class XI, Purnima Panchauli of Class XII, Meenakshi Meena of Class XII and Laveena of Class XI got first prize in the district level Sanskrit group singing competition organised by Sanskrit Bharati Sanstha at Govt. Girls College, Ajmer on 10 September 2018.
- ❑ NCC cadets of DM School, Ajmer attended the combined annual training camp (CATC) 2018 at Kayad Vishram Sthali, Ajmer from 8 to 17 October 2018. They participated in the March past competition and stood first. They won the shield for the best division in the March past.
- ❑ Diksha of Class IX, Saniya of Class IX, Sahil of Class IX, Harsh of Class IX and Aditya of Class IX got second position in the National Folk Dance and Role play competition organised by NCERT at NIE, New Delhi from 4 to 7 December 2018
- ❑ Divyanshi of Class IX, Ananya of Class IX, Payal of Class IX, Sakshi of Class IX, Himanshi of Class IX and Palak of Class IX got third position in Folk Dance Competition organised by NCERT at NIE, New Delhi from 4 to 7 December 2018
- ❑ Ganima Meena of Class XII got Bronze medal in 1500 m race at district level competition organised at Patel Stadium on 4 October 2018.
- ❑ Asrar Ahmed of Class XII got selection in the under State cricket team.
- ❑ Chirag Choudhary of Class VI, Aditya Yadav of Class VI, Abhishek Dholpuriya of Class VIII and Shiv Prasad of Class VIII got Bronze Medal in the Yoga Olympiad organised by NCERT, at NIE, New Delhi from 18 to 20 June 2018.



- ❑ Ankit Prajapati of Class XI stood first in the Science Exhibition held at RIE, Bhopal in which all the four DM schools participated.

2. 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 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.

Major Achievements of the School

Inter School Painting Competition

Every year DMS organises Inter School Painting Competition. 43rd Inter School Painting Competition was organised on 7 December, 2018 in DMS premises. Students of almost 40 schools participated in the competition.

3. DEMONSTRATION MULTIPURPOSE SCHOOL, BHUBANESWAR

Demonstration Multipurpose School, Bhubaneswar was established in the year 1964 as a laboratory school of the then Regional College of Education under NCERT, under the Ministry of Human Resource Development, Government of India, New Delhi. This school participates in identification, analysis, research and development related to major areas of school education. It acts as a *pace setting school* for Eastern Region of India. DM school is an English Medium Senior Secondary Co-educational school affiliated to Central Board of Secondary Education. School has 1115 students on its roll, out of which 571 are boys and 544 are girls. Among them 168 students belong to Scheduled Caste, 98 students Scheduled Tribes category, 11 differently-abled and 20 wards of ex-defence personnel. Last year 20 students of SC and ST category (Class VI–X) have been given Pre-metric Scholarship by Government of Odisha. Ten students of PH category have also been given scholarships by Government of Odisha.

Major Achievements of the School

- ❑ Pratyasa Ray of Class XI C participated in Swimming Competition (Zonal) organised by CBSE which was held at KIIT University Campus, Bhubaneswar and secured first position in 50, 100 and 200 mts Back Stroke and also first position in 50 mts butterfly.
- ❑ Pratyasa Ray in Class XI C participated at Swimming nationals organised by CBSE at DPS, Ranchi from 22 to 26 November, 2018 and she stood 1st in 50 and 100 mts Back Stroke, second position in 200 mts Back Stroke and 50 mts Butterfly.
- ❑ Dwarikanath Swain of Class IX got second position in State Level Table Tennis Championship, Inter School TT Championship in Team event, Table Tennis State championship held at NTPC, Kaniha, Odisha.



- ❑ Novita Mishra was honoured in the International Theatre Festival held at Cuttack, Odisha for her performance in performing arts.
- ❑ Swarup Dora, Sagar Pradhan and Bishnupriya Nayak won gold medal in National Yoga Olympiad organised by NCERT at NIE, New Delhi from 18 to 20 June 2018.
- ❑ Anuradha Barik and Subhasmita Mishra won bronze medal in National Yoga Olympiad organised by NCERT at NIE, New Delhi from 18 to 20 June 2018.
- ❑ Saswat Bal participated in State T.T Championship in team events and got third position.
- ❑ Abinas Otta and Sattwik Palai of Class XI took part in Senior Level *Bharat Ko Jano* quiz competition organised by Bharat Vikas Parishad (North Branch) and stood first.
- ❑ Bishnupriya Nayak of Class VII won second prize in English elocution competition organised by 'SAKSHAM' and she received second position in Debate Competition (Junior Group) organised by Divine Dance and music Academy.
- ❑ Arpita Tripathy, Class X received first position in English essay competition organised by Divine Life Society, Sivan and Sanskrutika Kendar, Bhubaneswar.
- ❑ Arpita Tripathy, Class X secured second position in English debate organised by Odisha Citizen Forum.
- ❑ Sattwik Palai, Class XII participated in a debate competition organised by Nirguna Trust, Bhubaneswar and got first position.
- ❑ Novita Mishra got Best Award in 26th An India Multilingual Classical and Folk Dance competition.
- ❑ Priyanshu Mohanty of Class X was felicitated by Bharat Vikash Parishad (North Branch) Odisha, as the Academically Talent Student of Secondary Section of D.M. School.
- ❑ Jyotirmayee Panda, Class-VIII took part in Music competition organised by Malaya Vihar Mahila Club and came first in the competition.
- ❑ Vaishnabi Ghosh, Class VIII took part in All India Chess Championship and secured first position.
- ❑ Vaishnabi Ghosh secured third position in *Krishna Besha Pratiyogita* organised by ISKON, Bhubaneswar.

4. DEMONSTRATION MULTIPURPOSE SCHOOL, MYSURU

The Demonstration Multipurpose School, Mysuru 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 of the Council, 2018–19

PUBLICATIONS

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. Apart from non-textual material, more than 364 textbooks for different Classes from I to XII are printed every year. About six crore copies of various NCERT publications in English, Hindi and Urdu which include textbooks, supplementary reading materials, teachers' handbooks, source books, research reports and six educational journals are brought out every year. 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. The Council has brought out energised textbooks, by using QR Code.

During the year, the Council brought out the publications titles '*Kala Shiksha par Prashikshan Package Prathamik Shiksha ke Liye*', '*Har Bachha Aham*', '*Shiksha Main Gunvatta Samvardhan Hetu Modules—Prashikshan Samagri (Anusuchit Jaatiyon Se Sambandhit Mudde)*', '*Chunautiyan Va Sarokaar*', '*Words and Expressions: Workbook in English for Class IX*', '*Workbook in Sanskrit for Class IX*', '*Dictionary of Urdu for Schools (Trilingual)*', '*Vidyarthi Hindi Santhali Shabdkosh*', '*Organic Farming for Classes VI–VIII*', '*Vigyan Shiksha Shastra, Bhautik Vigyan Bhag-1*', '*Handbook on Understanding Science through Activities, Games and Toys*', '*Women of North-East: Making a Difference*' and '*School Samajikaran evam Asmita*'.

Various issues of the journals, *Journal of Indian Education*, *School Science*, *The Primary Teacher*, *Prathamik Shikshak*, *Bharatiya Adhunik Shiksha*, *Indian Educational Review*, *On-line Journal—Voices of Teachers and Teacher Educator (VTTE)*, *School Science—A Quarterly Journal* and *Indian Journal on Vocational Education* were also brought out. During the year, 549 publications were released. Publication Division, NCERT empanelled 895 dedicated book sellers as its vendors for ensuring availability of NCERT publication across the country. The Urdu publications were distributed and sold through Urdu Academy, Government of NCT of Delhi.

RESEARCH STUDIES

In the area of research, the Council conducted studies in different areas of school and teacher education viz., issues related to teaching learning in multi-grade settings at the primary level, implementation of learning outcomes in States and UTs, situational analysis of DM schools and designing of model preschool, education of children with disabilities due to chronic health impairments, effect of aural reading (ICT based) on language comprehension of students with visual



impairments, Urdu language teaching and learning processes of JNU teachers, utilisation of science laboratories in learning, science in the higher secondary schools of NCR, identify the teaching strategies used by school teachers to teach mathematics, students' difficulties in conceptual understanding of science, a study of physics, biology and chemistry syllabi at the higher secondary stage, review and analysis of the economic syllabi and textbooks, teaching economics in schools and use of modern approaches to teaching and learning, factors influencing teacher' motivation and their performance, status and implementation of *Swachh Vidyalaya Abhiyan*, networking among teacher education institutions/centers in terms of auctioning, academic programmes and administrative setup of Bihar and Madhya Pradesh, National Achievement Survey— Class III, IV and VIII, assessment of learning levels of students at secondary stage (Class X) under RMSA (Cycle 2), School Based Assessment Practices, projection and trend of school Enrolment by 2025, implementation of CCE in elementary schools of Telengana State, implementing interventions at elementary school stage: A Block Level Research Project, impact of training programmes, causes and consequences of teenage motherhood and primary prevention for at-risk populations, children with learning difficulties and support systems available, difficulties in learning Chemistry among prospective teachers of B.Sc., B.Ed. Programme, learning outcome of Children with intellectual disabilities: exploring the determinants in inclusive classroom, effectiveness of flipped classroom, interventions to achieve quality learning in science, etc.

In addition, it also supported educational research through Educational Research and Innovations Committee (ERIC). Three research projects were completed with the financial support of ERIC during 2018–19. The Council continues 'NCERT Doctoral Fellowships' in which 10 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 2018–19, 10 candidates were selected for Doctoral Fellowship.

BLOCK LEVEL RESEARCH STUDY

The Council has taken up block level research project in different regions of the country wherein the blocks have been adopted and the interventions are made for bringing about improvement in the teaching-learning process. The blocks that have been adopted for the study are, Ichhawar in West, Chilika in East, Rigvoi in Northeast, Hurda in North and Hunsui in South. Besides, one block in Tripura also have been taken up which is being funded by the state government.

DEVELOPMENT ACTIVITIES

The development works of the Council include: Online courses for professional development of secondary teachers in arts education and environmental studies (EVS) for primary teachers; e-Contents in all areas of school and teachers education; guidelines on CCE; teacher performance assessment and preschool education; preschool curriculum; credit based ECCE curricula leading to certificate; audio-video programmes on good practices in ECE; resource



package for awareness in Early Childhood Care and Education (ECCE) manual; including children with special needs in teaching; experiments/activities in biology and chemistry at higher secondary stage; activity books for preschool children; exemplar bridge course for Out of School Children; handbooks for teachers working in Special Training Centers (STCs) for Out of School Children (OoSC) under RTE Act, 2009; understanding science through activities, games, toys and art forms at upper primary stage; resource material for children and teachers for primary grades; index for inclusive schools; roadmap for quality education for children residing in difficult terrains in the country; a comprehensive ECE Kit; video guide on the use of upper primary science kit; manual of geography kit; Learning Outcomes for secondary stage; Common Minimum Programme (CMP) for value education in schools; vocational interest inventory; practicum handbook of diploma course in guidance and counselling; textbooks in Biotechnology, Computer Science, and Informatics Practices; modules of training packages in chemistry, physics and biology for teachers teaching at higher secondary stage; tactile kits in science and mathematics at upper primary stage; teacher's guide; material on women in quit India movement; supplementary reading on human rights; trilingual dictionary of political science for schools (English, Hindi and Urdu); North-East of India: People, History and Culture: Hindi and Urdu versions; videos and manual on use of case studies and activities in teaching learning of economics at senior secondary stage for inclusive classroom; Teachers' manual to enhance the learning of Tamil as a functional language at the secondary level; e-resources for the school and teacher education curriculum; training module on textbook analysis in the context of North-East Region; bridge material for transition from tribal languages (Sadri and Kharia) to Assamese (School Language); course material of diploma in vocational education and training; student workbook for class XII of 'housekeeping supervisor' vocational course; student workbook as per curriculum of apparel made-ups and home furnishing course curriculum of 'Meet and Greet Officer'; training manuals for teachers of 'General duty assistant and vision technician'; an exemplar package on learning outcomes in EVS/science at elementary level; training package for in-service teachers on Technological Pedagogical Content Knowledge (TPCK) in science for secondary level; and manual for Training Needs Analysis (TNA) for the conduct of in-service teacher training programmes.

EDUCATIONAL TECHNOLOGY

Recognising the potential of technology in teaching-learning, various innovative curricular materials have been developed by NCERT. The Council developed e-Content which include images, 508 audio programmes, 300 video programmes, interactive, graphics, animations, digital books, timelines, digital maps, etc., for the entire syllabus of NCERT at all stages of school education. Massive Open Online Courses (MOOCs) platform popularly known as SWAYAM i.e., Study Webs of Active Learning for Young Aspiring Minds (<https://swayam.gov.in/>) offered various online courses for school education and higher education. NCERT has started development of course modules for MOOCs for school education in the subject areas viz., accountancy, business



studies, biology, chemistry, economics, history, geography, mathematics, physics, political science, psychology and sociology for Classes IX–XII. During the academic year on SWAYAM, 242 text modules and 132 videos have been developed for 11 MOOCs. In all 237 audio and 1397 video programmes, 50 audio talking books have been developed and these were disseminated through telecast on Ch #31 *Kishore Manch*, Web portals (National Repository of Open Educational Resources (NROER), an online repository (<http://nroer.gov.in> (NROER), e-Pathshala and SWAYAM), mobile app, through sales mechanism and various exhibitions, etc. Four phases of refresher course on ICT-pedagogy integration through online portal (LMS) <https://itpd.ncert.org.in/> conducted for DMS teachers of RIEs. Forty FOSSs were integrated in chrome book for further usage and certification to teachers. National Repository for Open Educational Resources (NROER) disseminates digital contents among all the stakeholders. Till March, 2019 a total of 13812 files including 401 collections, 2779 documents, 651 interactive, 1664 audios, 2586 images and 6133 videos are uploaded. e-Pathshala, web portal (<http://epathshala.nic.in/>, <http://epathshala.gov.in/>) has disseminated 1666 audios, 1789 videos, 698 e-books (e-pubs) and 504 flip books.

MHRD, Govt of India has developed a learning plan for utilisation of satellite communication technologies for transmission of educational e-contents through 32 National Channels i.e., SWAYAM PRABHA DTH-TV network. CIET, NCERT is the national coordinator for one DTH TV channel i.e., Kishore Manch (#31) and has started feeding a 24×7 slot. Every day four hour fresh slot is provided by CIET which is repeated five times in 24 hours to offer learning opportunities for the stakeholders. From September 2018, six hours slot is prepared which gets repeated 3 times to make it 24×7 Channel. During 2018–19, the Council initiated a live interactive programme on every working day covering various topics related to school and teacher education to help the students, parents and teachers. During examinations, a programme called ‘Guidance for Students: Exam Helpline’, specially for board students in collaboration with Department of Educational Psychology and Foundations of Education (DEPFE) has started. Booklets on *Guidelines on Cyber Safety and Security*, *Indian Journal of Educational Technology (IJET)* and *Information and Communication Technology*—A textbook for Class IX were published.

CAPACITY BUILDING

The Council conducts capacity building, orientation and training programmes for master trainers or Key Resource Persons (KRPs) in different areas of school and teacher education for ensuring quality education of all levels of school and teacher education. During the year, training programmes were conducted in the areas viz., preparation and use of science and mathematics kits, language education, science, social science, vocational education and vocational courses, gender issues in education, ICT in education, ECCE, integrated school literacy programme, guidance and counselling, value education, organisation of internship programmes, conducting educational surveys and assessment practices quality enhancement in school education, communication skills in English, healthcare (First Aid) management, use of classroom library, textbook development-cum-analysis, teaching in multilingual class, etc.



INTEGRATED TEACHER TRAINING MODEL

Addressing the concerns with respect to the lower learning outcomes, an integrated teacher training model was designed and piloted in the state of Tripura in December, 2018. The NCERT had built the capacity of around 284 Key Resource Persons belonging to different subject areas from educational institutions such as SCERTs, IASEs, CTEs, DIETs, BRCs, CRCs and Senior Secondary Schools. These 284 Key Resource were provided with contextualised modules on different themes focusing on learner-centred pedagogy and also participatory activity based sessions with a mechanism for further feedback, follow-up and support. These Key Resource Persons had trained 31,000 teachers at the elementary stage conducting block level training within two months. The web portal designed helped in tracking the follow-up training of KRPs and provided them access to modules and e-resources. The success of the model paved the way for proposing NCERT's model of integrated teacher training for the entire country.

EXTENSION ACTIVITIES

The extension activities of the Council include: national seminars on Status of Arts Education in India: Practices, Issues, Innovative Practices in Teaching Social Science at Secondary Level and Challenges and Integration among Indian Languages; national consultation meets on CCE and preschool curriculum and guidelines for preschool education; regional meets for capacity building of Key Resource Persons from States and UTs on Continuous and Comprehensive Evaluation (CCE); regional workshop on orientation of the preschool curriculum and guidelines for the pre-school education; *Samvaad* lecture series; Consultation meeting of stakeholders in Environmental Education (EE); Centre for Popularisation of Science; National conferences on mathematics education and Ancient Indian knowledge: Science and Technology; Conference of directors of SCERTs/SIEs; national awards for Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions; implementation of National Talent Search Scheme; nurturance programme for the NTSE Scholars; Celebrations of National Science Day, World Environment Day, 125th Year of Swami Vivekananda's Famous Speeches at World Parliament of Religion at Chicago 1893, 150th Birth Anniversary of Mahatma Gandhi, Mother Tongue Day; Munshi Premchand's birth anniversary and *Swachhta Abhiyan*; Extension Lecture Series; Early Childhood Education (ECE) programme; popularisation of science through biodiversity park; national conference on Achieving Sustainable Development Goals 2030, pre-internship conference for Co-operating School Teachers of JNVs and Orientation Programme for Co-operating School Heads for SAP; Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children; State Level Science, Mathematics and Environment Exhibition (SLSMEE) for Children; Meetings and Activities of Minority Cell; Screening-cum-Progress Monitoring Committee (SPMC) of Educational Research and Innovations Committee (ERIC); Meeting with State coordinators of RIEs for sharing of experiences of educational practices in States; Yoga Olympiad, *Kala Utsav*, National Role Play and Folk Dance Competition, etc.



Post National Achievement Survey (NAS) Interventions

The Council conducted the National Achievement Survey in 2017 by covering nearly 2.2 million children from 120,000 schools across all States and UTs in the country for Classes III, V and VIII and 1.6 million students in approximately 45 thousand schools for Class X in 2018. As a follow up of it, the learning gaps are provided to the States and UTs. Short term interventions to improve the quality of teaching and learning in the schools have been completed in the States/UTs and the medium term interventions at three different levels i.e., State, District and Block have been initiated.

Rashtriya Aavishkar Abhiyan

In order to connect school based knowledge to life outside the school and making learning of science and mathematics a joyful and meaningful activity, to bring focus on innovation and use of technology, the Ministry of Human Resource Development has set up the *Rashtriya Aavishkar Abhiyan* (RAA). The *Abhiyan* aims at nurturing the spirit of inquiry and creativity, love for science and mathematics and effective use of technology amongst children and encourage those who show an inclination and talent for these subjects to be encouraged and supported to heights of academic excellence and research. Guidelines for mentoring of schools by Higher Education Institutes (HEIs) under *Rashtriya Aavishkar Abhiyan* have been developed by the Council.

VOCATIONAL EDUCATION

The curricula, student textbooks and teacher handbooks for 100 job roles in various sectors have been developed. The learning outcome based curricula have been developed for vocational subjects offered from Classes IX to XII under the CSS of Vocationalisation of Secondary and Higher Secondary Education. The sectors for which the curricula and student workbooks have been developed include the following: Agriculture, Tourism and Hospitality, Apparel, Made ups and Furnishings, Private Security, Food Processing, Logistics, Electronics and Hardware, Healthcare, Retail, IT-enabled Services, Automotive, Plumbing, Construction, Media and Entertainment, Banking, Finance and Insurance, Telecommunication and Power. These textbooks are being published by NCERT and the soft copy can be downloaded from the website of NCERT (<http://ncert.nic.in/vocational/vocational.htm>) and PSSCIVE (http://www.psscive.ac.in/stud_text_book.html). e-Learning materials of employability skills have also been developed for facilitating teaching-learning. Training programmes on vocational pedagogy and vocational subjects (as per job roles) are also organised for the vocational teachers of the country.

International Collaborations and International Linkages

Keeping in view the importance of international cooperation in the field of school education, the Council hosts foreign delegations, facilitates their interaction with different Departments and Constituent Units pertaining to areas critical to their interest and needs, such as, educational policies, curriculum frameworks, pre-service and in-service teachers' education programmes, physical education, vocational education, ICT and ET, and conducts workshops, seminars and conferences involving MoUs signed with foreign institutions. In recent years, NCERT has signed MoUs with the institutions like Academy of Korean Studies,



Republic of Korea, Curtin University, Perth, Australia and Mauritius Institute of Education, Mauritius covering different areas of school education. Also, the Council initiated the process of signing MoUs with similar leading educational institutions in the countries viz., Bhutan, Nepal, Sri Lanka, Bangladesh, Afghanistan, Germany and Indonesia.





2. Major Publications

The NCERT publishes curricular materials including school textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports, monographs and educational journals for school and teacher education for wider dissemination among its stake holders. Research reports and monographs, and educational journals are also brought out by the Council.

Organic Farming for Classes VI–VIII

(ISBN 978-93-5292-016-7)

This book caters to the need of the students at the upper primary Classes VI–VIII. It follows a child centered approach for learning the concept of organic farming. The book provides opportunities to the learners to reap benefits from the experiences of the communities. It also provides pedagogical inputs for teachers as facilitator in inclusive setup.



Vigyan Shikshashastra, Bhautik Vigyan Bhag 1

(ISBN 978-93-5007-828-0)

The book has been developed for B.Ed. course to encourage divergence, reflection and insightful teaching-learning process. Many activities are given which guide teacher educators and students teachers in enhancing their professional competencies and motivate learners to learn science. Some experiences of practicing teachers are also given in the book. Attempt has been made to provide various aspects of pedagogy of physical science.



Handbook on Understanding Science through Activities, Games and Toys, NCERT

(ISBN 978-93-5292-093-8)

This book is an attempt to make teaching and learning of science interesting interactive, inclusive and child friendly. It also suggests some innovative pedagogy for learning of science through games, toys and fun activities for better understanding of science concepts. In this book, traditional games which are struggling for their existence among children in present era of technology are used as a tool in transacting the concepts of science in an innovative manner.



Har Bachha Aham Hindi Version of the Book Every Child Matters

(ISBN 978-93-5292-092-1)

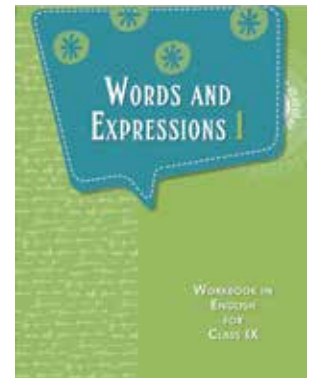
This handbook is to address the growing public demand to suggest the content and methods of organising quality pre-school education. It contains six chapters dealing with components of quality ECE programme, designing supportive learning environment, planning for quality ECE programme, techniques of observing young children, quality partnerships between preschool and parents and importance of action research in ECE.



Words and Expressions: Workbook in English for Class IX

(ISBN 978-93-5292-061-7)

The workbook in English, contextualised and aligned to the textbook *Beehive* for Class IX, has been developed to give the learners an exposure for activities to enhance their skills in language. The excerpts are taken from authentic sources and the learner's engagement with the texts would enhance their critical thinking. There are eleven units and learners get ample opportunities to reflect over contemporary issues, engage in grammar activities and opportunities of reading, writing, listening and speaking. The unseen comprehension passages are chosen based on the themes of the corresponding chapters. It has prose passages as well as poems.



A variety of tasks and exercises are placed strategically to build vocabulary in the given context. Even though difficult words are glossed in the margins, the learners are encouraged to use the dictionary as often as required. The intention is to help them learn new words and their usages as well as new meanings of familiar words in different contexts. The themes of the composition include ICT and advanced technology; contemporary issues like gender, environment, adolescent issues and social issues which are relevant to the age group and appropriate to the present time. This is to enable the learners to see the world, and develop necessary skills and face the challenges of the present as well as future.

Abhyaswaan Bhav — Workbook in Sanskrit for Class IX

(ISBN 978-93-5292-059-4)

The workbook *Abhyaswaan Bhav* in Sanskrit for learners in Class IX, intends to enhance the language proficiency of the learners. The exercises on language skills and grammar will familiarise learners with linguistic features of sanskrit language. There are activities based on unfamiliar passages, translation, letter writing, dialogue and paragraph writing. The exercises and activities will develop the vocabulary in sanskrit of objects of everyday use and communication skills of the learners. The activities are contextualised and based on the interest of learners.



Dictionary of Urdu for Schools (Trilingual)

(ISBN 978-93-5292-110-2 Year 2018)

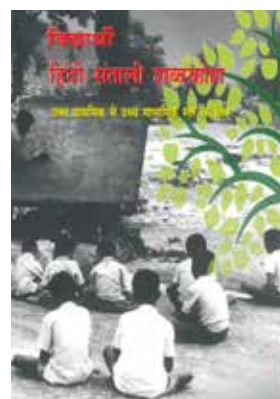
The dictionary has been developed for the effective teaching of urdu at upper primary and secondary stages. The trilingual dictionary is based on selected urdu words used in NCERT's urdu textbooks as well as urdu textbooks for upper primary and secondary stages developed by the States viz., Delhi, Bihar, Maharashtra, Andhra Pradesh, Karnataka, Tamil Nadu, Rajasthan, Uttar Pradesh, Madhya Pradesh, Jammu and Kashmir and West Bengal. Pedagogical approach has been adopted in developing the trilingual dictionary so that the use of any word may be understood in the context as a word gives different meaning in different contexts. Pronunciation of each word is given in urdu, english and hindi and the use of word is given in urdu.



Vidyarthi Hindi Santhali Shabdkosh

(ISBN 978-93-5292-108-9)

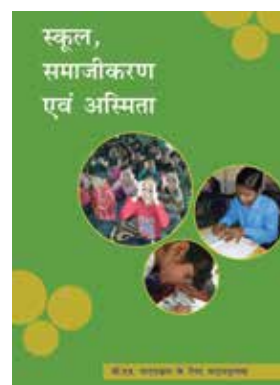
Vidyarthi Hindi Santhali Shabdkosh has been developed as an endeavour to sustain the tribal languages in education system and protect them from extinction for the learners who have *Santhali* as their mother tongue. The dictionary will be useful in hindi language learning for *Santhali* medium learners in school. This will also promote multilingualism as a strategy for learning. The dictionary as a compilation of words and phrases in *Santhali* will give exposure to the culture of the speakers of *Santhali* and their region.



School Samajikaran Evam Asmita

(ISBN 978-93-5292-099-0)

The textbook for B.Ed. programme is a translation of the english version of the book *School Socialisation and Identity*. It has chapters meant for both teacher educators and teachers in-service and pre-service.



Kala Shiksha par Prashikshan Paikaj Prathmik Shikshako ke Liye

The hindi version of the 'Training Package on Art Education for Primary Teachers' Vol. I and II consists of seven independent modules put together along with the DVD which has seven video films and four slide shows. It is in a logical sequence for the capacity building of primary teachers on art education as a subject and also on arts as an approach across school curriculum at this stage. Design of the package is focused on training of teacher educators and teachers both. It is an approach to train learners through hands-on experiences and viewing of best practices from the field in video form followed by discussions and reflective exercises.



Student Textbooks for Approved Job Roles in Different Sectors of Vocational Education

The following student's textbooks for Vocational Courses for Vocationalisation of school education have been developed under *Samagra Shiksha*.

S. No.	Sector	Name of the Job Role	Class
1.	Common for all sectors	Employability skills	IX
2.	Agriculture	Solanaceous crop cultivator	IX
3.	Agriculture	Animal health worker	IX
4.	Agriculture	Dairy farmer	XI
5.	Agriculture	Floriculturist (open cultivation)	XI
6.	Agriculture	Floriculturist (protected cultivation)	IX
7.	Apparels, made UPS and home furnishing	Hand embroider (<i>addawala</i>)	IX
8.	Apparels, made UPS and home furnishing	Hand embroider	IX
9.	Beauty and wellness	Assistant beauty therapist	IX
10.	IT/ ITeS	Domestic data entry operator	IX
11.	Plumber	Plumber	IX
12.	Retail	Cashier	IX
13.	Retail	Store operations assistant	IX
14.	Health care	Vision technician	XI
15.	Health and paramedical science	General duty assistant	XI
16.	Private security	Unarmed security guard	IX

Booklets on Guidelines on Cyber Safety and Security

Three booklets regarding cyber safety for teachers, students and schools have been developed. These booklets have been disseminated to all State agencies for further dissemination to schools. A brochure on cyber safety and security has been developed and disseminated. These booklets and brochure are also published online and can be accessed at: (https://ciet.nic.in/upload/Cyber_safety_for_schools_new.pdf), students (https://ciet.nic.in/upload/Cyber_safety_for_Students_new.pdf) and teachers (https://ciet.nic.in/upload/Cyber_safety_for_teachers_new.pdf). These were published online on CIET's and NCERT's website and were also disseminated among States and UTs.

Information and Communication Technology: A Textbook for Class IX

(ISBN 978-93-5292-118-8)

This textbook intends to introduce the world of ICT and its applications. It will help students to learn, prepare, present and communicate their thoughts, ideas and content through various digital formats, i.e., text image,

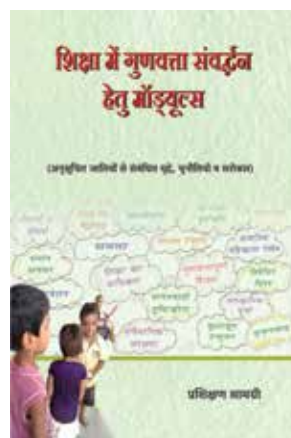


audio and video, etc. The textbook will also help students to understand the potential of internet as well as the safety and security issues related to it, and the ways in which one can safeguard themselves against malicious activities and incidents happening in the cyber world.

Shiksha Main Gunvatta Samvardhan Hetu Modules—Prashikshan Samagri (Anusuchit Jaatiyon Se Sambandhit Mudde, Chunaatiyan Va Sarokaar)

(ISBN 978-93-5292-078-5)

The training package consists of six modules on different issues and concerns related to access to quality education of children belonging to Scheduled Castes. These modules have chapters on Policies, Programmes and Schemes for Educational Development of Children from Scheduled Castes; Quality Improvement of Education of the Scheduled Caste Children; Equity, Equality and Non-discrimination of Children from Scheduled Castes in School; Right to Education Act, 2009 and Children from Scheduled Castes; Pedagogy and Constructivism; Gender Issues with Focus on Scheduled Castes Girl Students. These modules will be helpful in training of master trainers in Hindi speaking States.

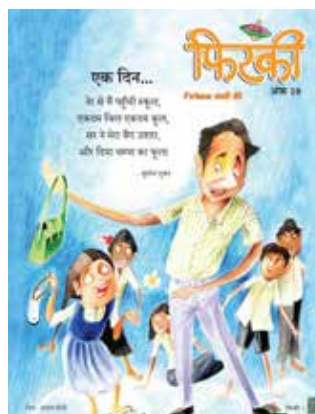


MAGAZINES AND JOURNALS

Firkee Bachchon Ki

(ISBN 978-93-5292-066-2)

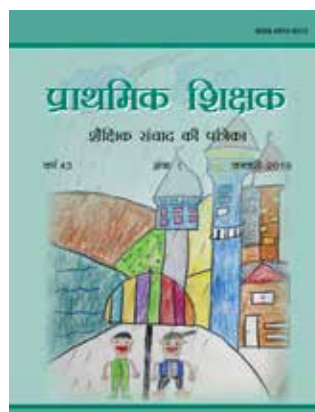
Firkee Bachchon Ki is a bilingual magazine for young readers. Ten issues of the magazine have been published. Three writing workshops have been organised at schools with primary grade students at DMS, Bhopal, KVS, Bhopal and *Udiya Basti Samaj Sewaks Amiti*. Storytelling, theatre, poem recitations, interaction with children were the activities conducted for the development of the materials. Writings/drawings were shared and discussed by the students. Students' writing was illustrated by the renowned professional illustrators and twelfth issue is completely dedicated to the children.



Prathmik Shikshak and The Primary Teacher

(ISSN 0970-9312 and ISSN 0970-9282)

The Journals, *The Primary Teacher* in english and *Prathmik Shikshak* in hindi publish research studies and articles on educational policies and practices. These provide a forum for teachers and teacher educators to share their experiences and innovations in various States and UTs and discuss



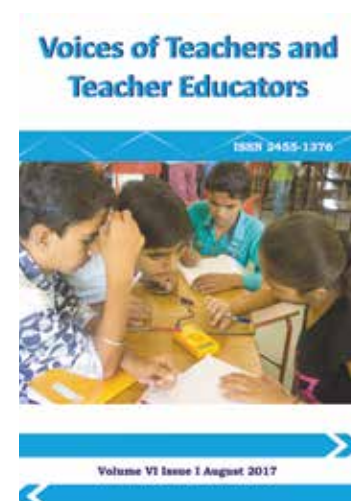
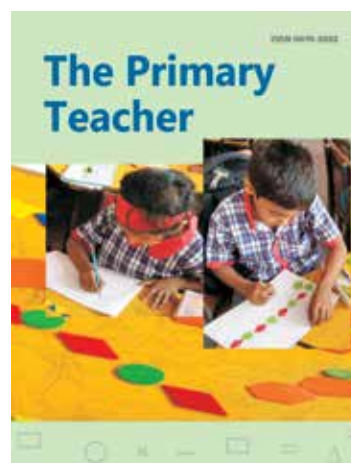
the contemporary issues in elementary/primary education. The journal also gives practising teachers and concerned administrators authentic information about the educational policies being decided on and pursued at the central level. *The Primary Teacher* October, 2015 and four issues of the Journal *Prathamik Shikshak* have been published and uploaded on the NCERT website. October 2015 issue of the journal *The Primary Teacher* was uploaded on the website.

Indian Educational Review

Indian Educational Review (IER), a prestigious research journal of NCERT, aims to enhance the theory and practice of research in education. The journal covers a wide range of issues, reports, reviews and empirical findings including studies in inter-disciplinary perspectives. The journal is published half-yearly in January and July. The issue of July 2017 has been published. Manuscripts for January 2018, July 2018 and January 2019 issues are under publication. Some initiatives have been taken to make the journal more useful. Since January 2018, survey of research on the topics Environmental Education, Education of Children with Learning Disabilities, and Social Science Education covering researches conducted from 2001 to 2015 is being included in each issue of the journal. It also contains summaries of completed research projects under ERIC.

Online Journal—Voices of Teachers and Teacher Educators (VTTE) (ISSN 2455-1376)

The journal *Voices of Teachers and Teacher Educators* (VTTE), an initiative of the Ministry of Human Resource Development (MHRD), is now being coordinated by NCERT. The Journal highlights the vital role of teacher education in India, as the country is poised to provide quality education to all children, irrespective of gender, caste, creed, religion and geography. This biannual publication is for teachers, teacher educators, administrators, researchers and policy makers. It seeks to provide a platform and build a network for our voices, ideas and reflections. Issue of VTTE published in August, 2018 was on teacher preparation and development. This issue of VTTE has a broad spectrum of papers from people with different experiences. The papers analyse the



challenges of the system at the institutional as well as individual practitioner level and give examples of possibilities of processes and mechanisms that show promise of hope. These include processes in the large public system and in private institutions. They also include studies with teachers and their own reflective experiences. The papers in this specific volume reflect the wide scope that teacher capacity development covers and underlines its importance while expressing concern about the way it is today. Volume VII, Issue I of VTTE included articles on varied issues of school education and teacher education. Articles related to learning outcomes, teacher development, vocational education, teaching learning processes, beliefs of pre-service teachers, development of curriculum and trainings in the light of researches, distance education and its importance, use of ICT, work based education, science classrooms experiments, assessment, etc., were published in this issue. This online journal motivates teachers and teacher educators to write their own experiences and voices in school education and teacher education for mutual sharing in e-Journal and have been uploaded on the NCERT's website.

Indian Journal of Vocational Education

A combined issue of Volume 24 and 25 of *Indian Journal of Vocational Education* for the period October 2017–March 2018 and April 2018–September 2018 have been published. This issue of the journal contains 10 articles of contemporary information which will provide a splendid forum for interaction with prominent experts in their respective fields.

Vocational Education Quarterly Bulletin

Two issues of Quarterly Bulletin 'Vocational Education' for the quarters April to June 2018 and July to September 2018 have been published. The bulletin comprises of the events and activities organised in the institute for different quarters and other important news concerning the institute during the quarter.

Indian Journal of Educational Technology (IJET)

(ISSN 2581-8325)

The first issue i.e., the January, 2019 issue of *Indian Journal of Educational Technology (IJET)* was published online on CIET's website. The journal is an online open access journal published bi-annually in english. It is a peer-reviewed journal where, a double-blind process of reviewing is followed. The first issue published five articles in different categories received from different institutions of the country. Open Journal System (OJS) is used for managing the editorial works of the Journal.



Annual Report 2017–18

The journey of NCERT, the apex organisation in school education, for the year 2017–18 has been brought out in the Annual Report. It provides a complete picture of the accomplishments and milestones of the Council in the form of its publications, research studies, development activities, capacity building programmes and extension activities. This report intends to facilitate valuable communication with a wider academic community, policy makers, educators and practitioners in the field.





3. Research Studies

The NCERT plays a pivotal role in forming policies and strategies to bring about desirable changes in the educational system. These are done on the basis of the insights gleaned through the research studies and innovations carried out, aided, and coordinated by the Council. During the year 2018–19, NCERT undertook both quantitative and qualitative researches, curriculum review, and evaluation studies on issues related to teaching learning in multi-grade settings, education of children with disabilities due to chronic health impairments, effect of aural reading on language comprehension of students with visual impairments, implementation of learning outcomes, utilisation of science laboratories in learning, factors influencing teachers' motivation and their performance status, and implementation of *Swachh Vidyalaya Abhiyan*. The Post NAS interventions, National Achievement Survey— Class III, IV and VIII, assessment of learning levels of students at secondary stage (Class X), School Based Assessment practices at elementary level, and projection and trend of school enrolment by 2025 were also conducted during the period. Studies on the implementation of CCE, implementing interventions at elementary school stage— a block level research project, impact of training programmes, causes and consequences of teenage motherhood and primary prevention for at-risk populations, difficulties in learning chemistry, learning outcome of children with intellectual disabilities: exploring the determinants in inclusive classroom, effectiveness of flipped classroom, interventions to achieve quality learning in science, and situational analysis of DM Schools and designing of model preschool provided evidence-based options and strategies to ensure educational development goals.

In addition, NCERT supported educational research through Educational Research and Innovations Committee (ERIC). Funding by the Council for the 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. Three research projects were completed with the financial support of ERIC during 2018–19. The Council continues 'NCERT Doctoral Fellowships' in which 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 2018–19, ten candidates were selected for Doctoral Fellowship from NCERT. Besides, the Council undertakes research studies under its M.Phil. and Ph.D. programmes.

DEPARTMENT OF CURRICULUM STUDIES

Rationalisation of Curriculum based on Analysis of Feedback received from Various Stakeholders

On the recommendation of Executive Committee of the NCERT in its meeting held in June, 2017, to constitute a committee on the reduction of curriculum load, NCERT constituted a committee with educationists, teacher educators, including a member from the Executive Committee of the NCERT as its members. The committee held its meeting on 5–6



Discussion on the Rationalisation of Curriculum based on the feedback received from various stakeholders

February, 2018 and suggested guidelines for the reduction of curriculum load. Further, suggestions from various stakeholders were invited on the website of MHRD from 5 March to 30 April, 2018. In this regard, NCERT had also placed advertisements in newspapers which informed the stakeholders about the MHRD's website for sending their suggestions on rationalising curriculum. Analysis of suggestions received from across the country was done by the subject experts and educationists at NCERT under the guidance of a committee set up to discuss the issue of rationalisation of curriculum. Further, syllabi and textbooks across subject areas and classes were analysed focusing on Learning Outcomes; curriculum linkages across classes and subjects; overlapping in the content (science and geography; physics and chemistry, etc.); comprehensibility of language; Age-appropriateness of the content; and diverse contexts for making a roadmap for the rationalisation of curriculum.

In this regard, several meetings were conducted with the concerned content departments, meetings with the Review Committee set up by NCERT to oversee the textbooks and also meetings of the committee constituted by NCERT specifically to oversee the rationalisation of curriculum. Report was prepared and the findings were shared with MHRD. Relevant suggestions were taken for consideration for incorporating in the curriculum for fulfilling the objective of rationalisation of curriculum. Textbooks were reviewed accordingly and published for the year 2019–20. Analysis of suggestions received from across the country was done internally by the subject experts of NCERT under the guidance of the committee set up to discuss the reduction of the curriculum load.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Education of Children with Disabilities due to Chronic Health Impairments: Case Studies

The two year research project was undertaken with the objectives to explore the nature and severity of chronic health impairments and to identify the difficulties in learning faced by the children. The study also investigates and analyse the implications of the existing educational interventions on learning outcomes of



these children. Under the project, the investigators interacted with children with Thalassemia, Sickle Cell Disease and Hemophilia, and their parents, teachers, family members and health care providers in Delhi, Maharashtra, and Gujarat. Research tools viz., Case History Performa, Interview Schedule for Parents, Children and Health Care Providers, and Questionnaire for Teachers have been finalised in a workshop. All the research tools have been tried out in Tapi and Dang districts of Gujarat from 13 to 15 March 2019. Data collection, analysis of data, and report writing will be carried out during 2019–2020.

A Study of Effect of Aural Reading (ICT based) on Language Comprehension of Students with Visual Impairments in Primary Schools of Delhi

The objective of the study was to explore the effect of aural reading on reading comprehension in Hindi and English through interactive customised ICT based textbooks that convert print into audio. This allows the students with and without Visual Impairments (VI) to study from the same printed textbook. The text for customisation that is ICT based printing with tactile touch points, for easy interaction by students with VI, was selected from Class V textbooks developed by NCERT for Hindi (5 lessons) and English (4 lessons). The lessons were chosen in accordance with the prescribed syllabus for estimated time (month and school term) for data collection. During pilot phase, data were collected from 31 sighted students and 3 students with VI as well as 25 students with VI studying in special education settings. The pre-post test research design was adopted and it was found that majority of the sighted students preferred reading with Smart Speak. All the participating students with VI preferred to read with Smart Speak because reading became effortless, enjoyable, provides audio description of visuals, and helped in correct pronunciation. The students with VI said that speed of the audio output was convenient. All students with VI said that the tactile touch points provided in the customised textbooks were sufficient.

DEPARTMENT OF GENDER STUDIES

Participation and Performance of Girls in National Talent Search Scheme (NTSS): A Spatial-Temporal Study from the Viewpoint of Gender Gap Analysis

The study was undertaken to analyse the trend of participation and performance of girls in NTS Scheme; to identify the causes of gender gap and gender stereotyping at every stage in NTS Scheme; to explore the impact of socio-economic background and nature of inputs in the success of awardees; to arrive at success stories of girls and to suggest strategies to improve the participation and performance of meritorious girls. The gender gap for the last few years has been calculated. Responses from NTSE takers, NTS awardees and their parents are being analysed to improve the participation of girls, views from key functionaries are also being considered. Nature of questions in board examination and competitive examinations are quite different, school teaching is not suitably preparing students for succeeding in competitive examinations, girl students are guided to focus on board examinations rather than on NTS. In case of social science, the syllabi are quite different in States and National Board, e.g., CBSE. For stage 1, the students have to prepare from state syllabus while for level II, the students have to prepare from national level syllabus.



Policy Research on Education and Skill Development from the Perspective of Gender Equality— A Comparative Study of India and Korea

The Goal 4 of the Sustainable Development Goals, UN, 2015 is to ensure inclusive and quality education for all and promote lifelong learning. The target by 2030, is to eliminate gender disparities in education and ensure equal access to all the levels of education and vocational training. Further, Goal 5 is to achieve gender equality and empower all the women and girls. In India, several strategies were adopted to promote girls' education as an integral part of the planned socio-economic development of the country. In Korea, education has played a pivotal role in the progress of Korea as a developed country. While educating for equality is the aim, policy support is a must. Therefore, analysis of the policies and plans of India and Korea will help in identifying the initiatives taken by them in bringing about equality with an aim to transform the scenario into a gender just society. This will help in formulating future policies and plans in both the countries aimed at achieving SDGs and sustained national development. The project has been funded by Korea Foundation of the Republic of Korea and has been completed in June, 2019. Specific recommendations have been made in the report for both the countries and also specifically for India and Korea, based on the analysis. For example, to combat the effects of patriarchy and gendered role expectations still prevalent in the society, Korea has made Home Science course compulsory for boys. Such an initiation can be very useful for India. Similarly, more focus on gender in Korea in its teacher education programmes and recognising education as a basic tool to transform society could be useful for Korea. Making school tolerance zones against gender violence will be useful for both countries.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

A Study of Utilisation of Science Laboratories in Learning Science in the Higher Secondary Schools of NCR

The research was conducted to study the effect of science laboratory learning experiences on science process skills of the higher secondary school students of Delhi, NCR. The research tools viz., a checklist to study the infrastructural facilities available in the science laboratories for the students, an observation schedule to observe the tasks performed by the



Researcher demonstrating titration experiment to the students of Class XII at N.P. Co-education Senior Secondary School, Moti Bagh, New Delhi

students in science laboratories and a questionnaire to study the major problems faced by the students in performing the science experiments were used for the study. The sample of the research study consisted of various government schools and private schools of Delhi, NCR. The study reveals that



the students studying in the government schools did not get ample opportunity to do practical works individually because of poor infrastructural facilities in science laboratories and lack of chemicals and other necessary apparatus. The study showed that for teaching-learning process all the schools under the study relied upon blackboard, books and manuals as teaching aids. More than 50 per cent of the schools used audio-visual aids, like power point presentations and e-Resources for demonstrating the experiments.

A Study to Identify the Teaching Strategies used by School Teachers to Teach Mathematics to the Upper Primary Students

The study was conducted to ascertain the teachers' perspective and their perception towards the different teaching strategies used by them while teaching different mathematical concepts at upper primary classes. The findings of the study reveals that most of the teachers responded that the need assessment is important but very few of them were able to explain in detail about need assessment. Most of them admitted that they did not put that much effort into planning part as they feel they were experienced to conduct the lessons.

Study of Students' Difficulties in Conceptual Understanding of Science at the Secondary Stage

The study was undertaken with the objectives to identify students' difficulties in conceptual understanding of science on various topics in science at secondary stage, to identify the science concepts which teachers find difficult to transact, and to find out the reasons of difficulties teachers face in transacting the concepts.

The study covered 902 students of the secondary stage and 68 teachers from 23 CBSE affiliated schools in five States viz., Madhya Pradesh, Manipur, Goa, Uttarakhand, and Kerala. The tools for the study were questionnaires, semi-structured interview schedules, and field notes. The findings of the study reveals that 70.22 per cent students of Class IX and 74.78 per cent students of Class X have difficulties in understanding some concepts in science. It is observed that 40 percent of Class IX students and 49.34 per cent of Class X students said that they felt like asking many questions, but did not ask questions in the class due to fear of being scolded. The major reasons of difficulties faced by the students include forgetting the concepts of learned in the previous class vastness of the course, irrelevance of the concepts in their day-to-day life and fast pace of teaching in the class. Almost all the students expressed that science classes should be more interactive and concepts should be explained with activities and experiments.

A Study of Physics Syllabi at the Higher Secondary Stage

In accordance with the recommendations of National Curriculum Framework, 2005, which envisages a periodic review of curricular material, the physics syllabi at higher secondary stage was reviewed in view of the feedback received from different stakeholders, advancements that have taken place in physics, physics syllabi that is in practice internationally, and also for including modern teaching-learning methods. The study recommends a contemporary physics syllabi for the higher secondary stage for consideration of the syllabus revision committee.



A Study of Biology Syllabi at the Higher Secondary Stage

As envisaged in the National Curriculum Framework, 2005 about periodic review of curricular material, the present effort had an objective to revise biology syllabi at higher secondary stage in view of the feedback received from different stakeholders, recent developments taken place in biology, biology syllabi that is in practice internationally, etc. The study recommends the biology syllabi should also focus on contemporary issues with the objective to develop critical thinking abilities besides the concepts of biodiversity study. The recommendation may be considered while reviewing the syllabi of Biology at higher secondary stage in future.

A Study of Chemistry Syllabi at the Higher Secondary Stage

National Curriculum Framework, 2005 envisages a periodic review of curricular material. Hence, the study was proposed to review the chemistry syllabi at higher secondary stage with the objective to propose a modified suggested syllabi in chemistry for future revisions. The existing syllabi of chemistry at higher secondary stage was analysed and modified in the light of feedback received from different stakeholders, advancements that have taken place in last few years in the area of Chemistry and related areas, and chemistry syllabi that are in practice internationally at this stage of education. The report may provide insights in the direction of revising the chemistry syllabi in future.

DEPARTMENT OF ELEMENTARY EDUCATION***An Exploratory Study on Issues Related to Teaching Learning in Multi-grade Settings at the Primary Level***

The present study was conducted to understand the issues of teaching and learning in multi-grade schools at primary level in the State of Rajasthan. The objective of the research was to study different patterns of organising multi-grade teaching and classroom management to optimise time-on-task by the teacher. Four research tools viz., School Schedule, Teacher Questionnaire, Classroom Observation Schedule, and Template for information related to State, district, and block demographic and educational profile were developed to collect the data. The data have been collected from 32 schools representing single teacher, two-teacher and three-teacher schools from Bharatpur and Alwar districts. The teachers informed that they never got any orientation on classroom management and pedagogical practices which could be useful for multi-grade teaching. Shortage of teachers and load of non-academic works were the major reasons for the multi-grade teaching.

A Study of Implementation of Learning Outcomes in States and UTs

The research study was undertaken with the objectives to find out whether States and UTs have adopted or adapted Learning Outcomes developed by NCERT, to study the strategies designed and implemented by States and UTs for proper dissemination and implementation of Learning Outcomes up to the grass root level and to find out the problems and issues, if any, faced by States and UTs in the implementation of Learning Outcomes. The study aimed to cover all the States and UTs. The data were received from 32 States and UTs. The major findings are that the States have got the document on Learning Outcomes and most of them have adopted the document developed by NCERT. The document has been distributed to all the schools in the same



language which is followed as the medium of instruction. Short-term training programmes have been conducted mainly for the teachers and monitoring officers but follow up is lacking. The States have informed that though they were not facing any peculiar problems but they need time to properly implement the Learning Outcomes and re-orient the pedagogic and assessment practices as per the Learning Outcomes.

Situational Analysis of DM Schools and Designing of Model Preschool

The study was carried out in four RIEs situated at Ajmer, Bhopal, Bhubaneswar, and Mysuru, and also at IIT Nursery School (Lab school of DEE, NCERT) in two Phases (Phase I, 2017–18) and (Phase II, 2018–19).

The primary objective of the research study was to design the preschools attached to the Demonstration Multipurpose Schools of four RIEs, and IIT Nursery school for improving the quality and functioning of programmes in the preschools.

The study followed a non-experimental mixed design having a balance of quantitative and qualitative research methods. The research data were collected by observing the children at a task, the functioning of the preschool programme, the interaction and play of children during small group activities in the well designated Interest Areas. Interviews with the preschool teachers and Headmasters were also conducted.

The major findings of the two phase study are as follows:

- ❑ There were no child-friendly toilets and basins available in any of the preschools at RIEs except IIT Nursery School;
- ❑ All the preschools now have two years of pre-schooling;
- ❑ In Phase-I, there were no 'Interest Areas' in any of the preschools. However, after regular intervention and guidance, the basic eight Interest Areas were developed in all the four RIEs except sensory play area;
- ❑ In all the four RIEs and IIT Nursery School, the transactional strategies play activities, which are age and developmentally appropriate comprised of some worksheets used were not found age and developmentally appropriate.
- ❑ Although the teachers were observing the children's play, recording and reporting needed to be further strengthened;
- ❑ Majority of Class I teachers have observed that pre-primary children at the entry level of Class I showed the expected level of learning; and
- ❑ Now there is a well stated and identified preschool curriculum given to all the RIEs.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

A Review and Analysis of the Economic Syllabi and Textbooks at the Higher Secondary Stage

The study was undertaken to compare and contrast the unique features of the economic syllabi, and textbooks used in different countries and to review the different syllabi. Efforts were made to procure it by contacting the embassies of different countries while some were downloaded from the websites of the respective countries. The study looked into the economics syllabi of twenty countries like Switzerland, California, China, Sri Lanka, United Kingdom, Japan, and different boards like ICSE and IB Boards. The study analysed the



diverse features of the syllabi adopted at the secondary and higher secondary stages in different countries. One such unique feature included division of the units into strands (innovative approach), and it has been stated in the form of questions. Another feature highlighted in the study was the development of the syllabus from the local perspective. This study will be effective in revising the economics syllabus at the secondary, and higher secondary stage and will also contribute towards the development of quality textbooks.

Teaching Economics in Schools and use of Modern Approaches to Teaching and Learning: A Study of Schools Affiliated to Higher Secondary Examinations in India

Economics is an important subject opted by students at the higher secondary stage in India. The *National Curriculum Framework 2005* has been accepted by both State and Union Governments to be implemented in schools. This policy document contains many suggestions for schools and teachers which are unconventional. This study was conducted to examine the extent to which the modern teaching learning practices are followed in schools. The guidelines of the *NCF 2005* have been considered as the benchmark. Five States viz., Delhi, Madhya Pradesh, Maharashtra, Tamil Nadu, and West Bengal, one State from each region of India, was randomly identified. More than 700 students studying in Class XI and XII under different management viz., State and Union Government, aided, private unaided, etc., and 70 economics teachers working in 50 schools participated in the study. A large section of students use economics textbooks and guidebooks published by the private publishers. Some economics textbooks published by the government agencies did not receive positive comments from students and teachers, emphasising the need to review textbooks. The extent of modern teaching learning processes was found in schools depending on the school management, State and different examination boards.

EDUCATIONAL SURVEY DIVISION

National Achievement Survey — Class III, V and VIII— NAS Interventions

The department conducted the National Achievement Surveys, with districts as the unit of sampling, NAS (2017–18) that provides the learning levels of the children vis-a-vis the learning outcomes. It was administered on 13 November, 2017 on nearly 2.5 million children from 1,20,000 schools across all the States



Expert from American Institute of Research addressing the participants in the stakeholders workshop for developing conceptual definition and using cut score methods to define the proficiency level at Class III, V and VIII

and UTs in the country for Classes III, V and VIII, and on 5 February 2018, on 1.6 million students in approximately 45,000 schools for Class X. The learning gaps identified are now being used to provide feedback to the districts in the States and UTs. A framework of intervention is being suggested to improve the quality of teaching and learning in the schools.

During the year 2018–19, the short term interventions have been completed in the States and UTs and the medium term interventions have been initiated. These interventions are being targeted at three different levels i.e., State, District, and Block. As a part of the medium term NAS interventions, the division organised regional workshops for sharing of findings of NAS with the district level functionaries and other stakeholders, development of road maps by the districts looking at the evidences from the NAS, orientation on evolving learning strategies to enhance the learning outcomes at different grade levels, orientation of school leaders in the use of assessment data to improve teaching learning in the States and UTs, facilitating in using alternative instructional strategies to bridge the learning gaps with the support of State functionaries (SCERTs/SIEs), seeking support from community to improve the learning levels and using sports and games to enhance the learning levels.

State Specific NAS Workshops

S. No.	Venue	Date
1.	Chennai	27–29 August, 2018
2.	Jammu	27–31 August, 2018
3.	Goa	5–8 September, 2018
4.	Srinagar	11–15 September, 2018
5.	Maharashtra	17–19 September, 2018
6.	Andaman & Nicobar Islands	24–26 September, 2018
7.	Telangana	24–26 September, 2018
8.	Puducherry	24–26 September, 2018 and 25–26 February, 2019
9.	Lakshadweep	24–26 September, 2018
10.	Raipur, Chhattisgarh	08–10 October, 2018
11.	Meghalaya	20–22 November, 2018
12.	Sikkim	26–30 November, 2018
13.	Gujarat	03–07 December, 2018
14.	Tripura	09–12 December, 2018
15.	Rajasthan	24–25 January, 2019
16.	Kochi	15–16 February, 2019
17.	Assam	06–08 March, 2019
18.	Mizoram	06–08 March, 2019
19.	Bihar	07–08 March, 2019
20.	Jharkhand	25–26 March, 2019



Assessment of Learning Levels of Students at Secondary Stage (Class X) under RMSA (Cycle 2)

NAS Class X—Cycle 2 was conducted in 34 States and UTs on 5 February 2018. National Achievement Survey Class X—Cycle 2 is a sample based survey across districts in the country. The survey was done in government-aided and private schools. About 15.5 lakh students and 2 lakh teachers participated in the survey. The performances of students in five major subjects viz., English, Mathematics, Science, Social Science, and Modern Indian Languages (MIL) were assessed. The reporting unit in this survey was district. The State officials involved in NAS Class X were trained region-wise. The MIS coordinators of all States and UTs were trained to upload the data online. The tests were administered in 14 mediums of instruction and MIL in 19 different languages.

The main objectives of National Achievement Survey Class X (Cycle 2) were to study the achievement levels of students of Class X from government, government-aided, and private schools in English, Mathematics, Science, Social Science, and Modern Indian Language (MIL), to study the difference in achievement levels with regards to area, gender, social group, board and management of schools, to study the effect of intervening variables like students' home background, school and teacher on achievement levels of students and to compare the performance of students in all subjects from Cycle 1 to Cycle 2.

A Study of School Based Assessment Practices at Elementary Level

School Based Assessment (SBA) will be used to improve the quality of learning in the schools. The SBA developed is a logical continuum to the quantitative assessment and serves as a precursor to the next NAS to be held in 2020. The SBA and NAS, in tandem, would provide holistically, the assessment of the learning levels as well as the interventions for improving them. The designing and piloting of the SBA model has been completed.

The key features of the school based assessment are to initiate and continue a dialogue between students and teachers from the beginning about learning and assessment, collection of multiple evidences of students' learning, non-standardised assessment to link to individual learning styles of each child, self and peer assessment used in conjunction with teacher assessment, assessment of personal-social qualities along with cognitive competencies, feedback mechanism allowing the teacher to give immediate and constructive feedback to students, assessment to be done in a non-threatening manner, complement other forms of assessment, including external examinations and for involvement of the families and community in the learning process.

Projection and Trend of School Enrolment by 2025

Policy makers and planners require projected enrolment data for undertaking an exercise of future planning in respect of educational development. Indicators of development are directly or indirectly related to the size and structure of the population. Enrolment projection or forecasting, which provides information for decision making and budget planning, is important in many ways to the system. Because of its importance, researchers have proposed many projection methods to project the information. Enrolment projection is required to update the system through estimating future enrolments, requirement, and providing facilities on a periodic basis. Hence, the study was undertaken by the division to know the various aspects of size and structure of enrolments at different points of time.



The executive summary of study are as below:

- ❑ Overall, a growth of more than 800 per cent has been projected in enrolment of children in school system in Classes I to X during 1950 to 2025. An interesting point observed that share of girls' students has very precipitously increased over the period of 75 years.
- ❑ At the primary stage, total enrolment increases from 192 lakh (1950) to 1174 lakh approximately (2025), where boys' enrolment increases by 345 percent and girls' enrolment raises by more than 900 per cent, over the period.
- ❑ At the upper primary stage, total enrolment increases by 1800 per cent where boys' enrolment increases by more than 1100 per cent and girls' enrolment raises by 5800 per cent.
- ❑ Growth is also recorded at secondary classes during 1950 to 2025. A total enrolment increase with 2620 per cent where boys' growth in enrolment is recorded almost 1585 per cent and girls' growth is about 9300 per cent.
- ❑ Enrolment is a function of population so decline in the child population in age group 6–11, 11–14, and 14–16 years reflected on the enrolment of that particular stage.
- ❑ The growth in enrolment at primary stage continued up to year 2011. After 2011, the enrolment is declining and will continue to decline till 2025. During the period 2011 to 2025, total enrolment decreases about 14.37 per cent whereas boys' enrolment decreases by 13.28 per cent and girls enrolment decreases by 15.54 per cent.
- ❑ At the upper primary stage, the enrolment of boys, girls and both started declining from 2016. During the period, enrolment decreased by 7.4 per cent (in total), 6.2 per cent (boys), and 8.7 per cent (girls).
- ❑ Similarly, decline in enrolment is also recorded at secondary stage but here, the decline is starting from 2019.
- ❑ In social groups — Scheduled Castes and Scheduled Tribes, the decline in school enrolment pattern is very similar to India's enrolment pattern. After 2016–17 and 2017–18, the enrolment of Scheduled Castes and Scheduled Tribes children is almost uniform in all the stages for some years. It may be due to stagnancy in population.

DIVISION OF EDUCATIONAL RESEARCH

Research Reports Completed under ERIC

The following ERIC projects were completed and reports have been submitted.

S.No.	Title of the Project	Name of the Principal Investigator
1.	An in-depth Study of Implementation of Sanskrit Language Curriculum in all Stages of School Education	K.C. Tripathi, <i>Professor of Sanskrit</i> , DEL, NCERT
2.	A Study on Environment Attitude of Elementary Students and Pre-service Teachers in Meghalaya	Seema R. Nambiar, <i>NERIE</i> , Umiam



3.	Pedagogical Content Knowledge of Science in the Teacher Education Sector: A Development and Research Project	Padma M. Sarangapani, Tata Institute of Social Sciences, Deonar, Mumbai
----	--	---

Ongoing ERIC Research Projects

The following ERIC projects continued during the year under report.

S. No.	Title of the Project	Name and Address of the Principal Investigator
1.	An in-depth Study of Implementation of English Language Curriculum in all Stages of School Education	R. Meganathan, <i>Professor</i> , DEL, NCERT
2.	An in-depth Study of Implementation of Urdu Language Curriculum in all Stages of School Education	Faruq Ansari, <i>Professor</i> , DEL, NCERT
3.	Investigating the Root Causes of Under Achievement among Gifted Under Achievers and Adapting Trifocal Model for Reversing their Under Achievement	Supreet Kaur, <i>Assistant Professor</i> , USOL, Punjab University, Chandigarh
4.	Functioning of SMDC in Planning, Management and Supervision of Secondary School Activities in Tribal Areas of Odisha under RMSA - Primary to Senior Secondary Education	Sarat Kumar Rout, Ravenshaw University, Cuttack, Odisha
5.	Development of Phonological Processing Assessment Tool for Primary School Children	Jayashree S. Bhat, Manipal University, Mangalore
6.	Impact of Stress, Anxiety and Physical Activity on the Academic Performance of School Children	Annie Thomas, JSS Hospital Campus, Mysore, Karnataka
7.	Cultural and Psychological Factors in Education of Kharwar Adivasi Children	Yogesh Kumar Arya, BHU Varanasi, Uttar Pradesh
8.	The Implementation of Inclusive Education in Kashmir Province of Jammu and Kashmir State	Amina Parveen, University of Kashmir, Srinagar
9.	Study of Existing Pedagogical Practice, Issues and Challenges in Inclusive Education for Promoting Participation of Special Needs Children in General	Harpreet Kaur <i>Principal</i> , Sri Guru Harkrishan Model School, Chandigarh
10.	Impact of <i>Sarva Shiksha Abhiyan</i> (SSA) with special reference to Universalisation of Female Education in Jammu and Kashmir	Nilofer Khan, <i>Professor</i> , University of Kashmir, Srinagar
11.	Development of a Framework of Pedagogical Content Knowledge on Arithmetic for Primary Teachers of Mizoram	Lokanath Mishra, Mizoram University, Aizawl
12.	A Study of Language Across the Curriculum Pedagogy on Students' Learning	Kirti Kapur, <i>Professor</i> , NCERT, New Delhi



13.	An Explanatory Study on Triadic Social Interactions within School Social Geography in Tribal Areas of Kerala	Justin P. Jose Dharmagiri Jeevas Social Centre, Kannur, Kerala
14.	Primary to Senior Secondary: Education Scenario in Sikkim — Potential of Participatory Communicative Approach	Pema Subba, SCERT, East Sikkim
15.	Influence of English Teachers' Efficacy, Competence and Motivation on Their Instructional Strategy: A Study of Secondary Schools Teachers in Jhunjhunu, Rajasthan	Devika, <i>Professor</i> , BITS Pilani, Jhunjhunu Rajasthan
16.	Work Education and Entrepreneurial Intention among the Students of Higher Secondary Schools in Imphal West District, Manipur	Kh. Devananda Singh, North Eastern Hill University, Meghalaya
17.	A Study of Equity and Inclusion in Education of Gujjars and Bakerwal (Scheduled Tribes) of Kashmir Division	M.Y. Ganai, University of Kashmir, Srinagar
18.	Developing Multimedia Package of Local Folk Tales and Its Impact on Functional English of Rural Children	N. Vasuki, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
19.	Impact of Mothers' Work under National Rural Employment Guarantee Act (NREGA) on Preschool and School Education: A Comparative Study of Haryana and Tamil Nadu	P. Geetha Rani, University of Tamil Nadu, Thiruvavur
20.	Exploring the Culture of Learning based on Nai Talim: A Case study of Aanand Niketan School	Rishabh Kumar Mishra, Wardha
21.	A Study of Information Communication Technology Integration in the School System of Jawahar Navodaya Vidyalayas of Chhattisgarh	Sambit Kumar Padhi, Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh
22.	A Concept Map Recommendation System for Student Learning and Evaluation	Sunu Mary Abraham, Rajagiri College of Social Science Kalamassery, Kochi, Kerala
23.	Use of Assistive Technology to Enhance Literacy Skills in Children with Learning Difficulties	T. Geetha, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
24.	Development of Phonological Assessment Tool in Kannada	Veena K. D., School of Allied Health Science, Manipal



Screening-cum-Progress Monitoring Committee (SPMC) of ERIC

Two meetings of the Screening-cum-Progress Monitoring Committee of ERIC were held at NIE, New Delhi on 19–20 November, 2018, and 11–13 March 2019. There were 21 proposals identified for interview-cum-presentation for financial support under ERIC. Eleven research projects were recommended for funding under ERIC.

S. No.	Title of the Project	Name of the Principal Investigator
1.	A Comparative Study of Status of Implementation of RPWD Act 2016 for Inclusive Education in Government and Private Schools of Chandigarh, Panchkula & Mohali	Sneh Bansal, <i>Associate Professor</i> , Department of Education, Chandigarh, Group of College Mohali, Punjab
2.	A Case Study Approach to Explore 'Ownership' of the Students in the Process of Constructivism Approach of Learning and Achievement in Secondary School Science	Biswajit Behera, <i>Assistant Professor</i> , Department of Education, Central University of Punjab, Punjab
3.	Development of Alternative Assessment Tools for Science in Constructivist Classroom at Elementary Level and its Impact on Achievement Motivation and Test Anxiety of Students	Jubilee Padmanabhan, <i>Assistant Professor</i> , Department of Education, Central University of Punjab, Punjab
4.	Developing a Standardised Intervention Programme for Teachers for Mentoring Students At-risk	Annalakshmi Narayanan, <i>Professor</i> , Department of Psychology Bharathiar University, Coimbatore
5.	Quality and Quantity Analysis of Impact of Inculcating Human Values Among Rural School Children	K. Manimozhi, <i>Professor</i> , Department of Resource Management & Controller of Examinations, Avinashilingam, Deemed University, Coimbatore
6.	Necessity of Vernacular Language Education on Primary Level in Tribal Districts of Odisha State	Laxmikant Paikray, Social Welfare Organization for Rural Development (SWORD), Bhubaneswar, Odisha
7.	Impact of Militancy on Educational Development — A Case Study of Jammu and Kashmir	Shabir Ahmad Bhat, <i>Assistant Professor</i> , Department of Education University of Kashmir, Srinagar
8.	Teaching about Mangroves to School Children of Krishna and Godavarie Estuaries	D. Suresh, I/C, <i>Director</i> , Alluri Seetharama Raju Centre (ASR) Mahatma Gandhi National Institute of Research and Social Action, Hyderabad
9.	Integration of Digital Media Technology in B.Ed. Teacher Education Curriculum	C. Thanvathi, <i>Assistant Professor</i> , VOC College of Education Toothukudi, Tamil Nadu



10.	Developing Active Social Learning Interventions and Assessing their Impact on Environment Sustainable Consumption Behaviour of Primary Children	Leela Rani, <i>Associate Professor,</i> BITS, Pilani, Jhunjhunu, Rajasthan
11.	Developing Science Process Skills of Secondary Students through e-Content Package	P.S. Sreedevi, <i>Assistant Professor,</i> Department of Education, Gandhigram Rural Institute Deemed University, Gandhigram

ERIC Meeting

A General Body meeting of New Educational Research and Innovations Committee (ERIC) was held at NIE, New Delhi on 14 March, 2019. The activities of the Division of Educational Research were discussed during the meeting and the status of completed and on-going ERIC Research Projects was reported to the committee.

NCERT Research Associateship (Educationists'/Researchers' Pool Scheme)

NCERT Research Associateship (Educationists'/Researchers' Pool Scheme) has been initiated to utilise the experience and understanding of young educationists/educational researchers in the area of school education, who have done their Ph.D. but still are not in regular jobs. This will give these young people a chance to contribute and gain experience in their relevant areas pertaining to school education. NCERT, in particular, and the education system in India as a whole, will also gain through the energies, enthusiasm and knowledge of these young people. This scheme has been envisaged on the line of the Research Associateship (Scientists' Pool Scheme) of the CSIR.

The scheme is to select and engage some Research Associates to fulfil the above objectives. These Research Associates will be expected to undertake some projects in the Council, according to Council's priorities or undertake tasks as a faculty in the NCERT.

Applications for the Research Associate are invited through open advertisement. The same is also uploaded on NCERT website. Around 20 applications were received. The applications were shortlisted by a committee on the basis of a pre-determined criteria developed for the purpose. The process for selection of Research Associate for the year 2018 has been completed. Two Research Associates have been selected.

PLANNING AND MONITORING DIVISION

A Study of Global Citizenship Education in the Secondary Schools of India

Global Citizenship Education (GCED) is a form of civic learning that involves students' active participation in projects that address global issues of social, political, economic, or environmental nature. The division has conducted the research study in the States of Kerala, Haryana, and Sikkim with the objectives to analyse the secondary school curricula and various curricular practices related to the elements of Global Citizenship Education and to find out the relation between curricular practices and the socio-emotional competence of secondary school students. The analysis of textbooks show that there is ample amount of GCED related elements in the curriculum



which help the learners to think about the global problems and challenges. The Student Police Cadet (SPC) project implemented in Kerala and Haryana and the *Sri Satya Sai Vidya Vahini* project implemented in Sikkim were analysed. The positive impacts of these programmes with respect to GCED have been observed in different schools of Kerala, Haryana, and Sikkim. The analysis of the curricular practices show



Researcher interacting with the Teachers of Haryana as part of research study on GCED

that these kind of programmes ensure active participation of students in projects that address the social, political, economic, and environmental issues stretching from local to the global. The projects substantively influenced the attitude and behaviour of most of the students transforming them as responsible members of the society. The programmes also helped in developing requisite socio-emotional competence skills to face day-to-day challenges. It also developed various values and skills such as critical thinking, decision-making, problem-solving, negotiation, peace-building, and personal and social responsibility among the students. Positive changes were also visible in the teacher-student relationship and community involvement due to the implementation of these projects.



Researchers interacting with the Students Police Cadets (SPC) of Kerala as part of research study on GCED

Annotated Bibliography of Researches Conducted in NCERT during 2012-2017

NCERT conducts a large number of research studies every year approved by the Programme Advisory Committee (PAC) and also supports researches under ERIC. The project was conducted with the objectives to compile brief of researches conducted in NCERT during 2012-2017 and to disseminate the



research works taken up by NCERT in the area of school education and teacher education during 2012–2017. Research studies conducted during the period under the PAC and ERIC have been collected based on which the annotated bibliography has been prepared. The report is being printed by Publication Division.

RMSA PROJECT CELL

Interventions to Achieve Quality Learning in Science in Selected Schools in ST Dominated Districts of Nagaland: A Case Study

The study was undertaken with the objectives to assess the baseline situation in the selected schools, in terms of students' achievement, resource availability and teachers' competency in learning of science, to identify the factors responsible for the low performance of the students in science, for designing interventions to achieve quality learning in science and to study the effect of interventions on learning of science among



Discussion on the Intervention to achieve quality learning in Science in selected schools in the ST dominated areas of Nagaland

secondary school students. The sample of the study was identified based on the students' performance in science in NAS and State results. All students of Class IX and the teachers teaching science in the school of Zunheboto, Scheduled Tribes dominated district of Nagaland were selected for the study.

The study revealed that the infrastructure facilities like laboratory, science kits, etc., were inadequate in the schools. Moreover, lack of motivation among teachers and students, monotonous way of teaching through chalk and talk method, lack of pedagogical content knowledge and technological knowledge, lack of awareness of alternate forms of assessment and career opportunities in science, less opportunities for curricular activities related to science, and lack of participative leadership in schools are the factors for low performance of the students in science subject.

DEPARTMENT OF TEACHER EDUCATION

Study of Factors Influencing Teachers' Motivation and their Performance

The objectives of the study were to identify and understand the factors responsible for the motivation of teachers; to prioritise the identified motivating factors of teachers in the order of their importance to influence performance; and to understand the dependence of motivation of teachers on various identified factors. The study reveals that the individual ability of teachers, understanding of their role and responsibilities, current compensation package for teachers, attributes of school, prospects of future growth for teachers, objective evaluation and incentives in school system, concern of Head of School (HOS) for academic efficiency, concern of Head of School (HOS) for administrative efficiency, internal school (organisational) environment, supportive classroom environment and extra duties assigned by the Directorate of School Education have negative



influence on the teachers' performance. It was also found that the factors affecting teachers' performance in the order of their decreasing importance are as under: (i) Individual ability of teachers; (ii) Concern of Head of School (HOS) for administrative efficiency; (iii) Supportive classroom environment; (iv) Teacher motivation; (v) Internal school environment; (vi) Objective evaluation and incentives in school system; (vii) Current compensation package for teachers; (viii) Prospects of future growth for teachers; (ix) Concern of Head of School (HOS) for academic efficiency; (x) Understanding of role and responsibilities by teachers; (xi) Supportive external environment; (xii) Attributes of school, and (xiii) Extra duties assigned by the Directorate of Education.

A Study of the Status and Implementation of Swachh Vidyalaya Abhiyan in Maharashtra

The objectives of the research were to study the awareness among children and teachers of *Swachh Vidyalaya Abhiyan* in the elementary and secondary schools of Maharashtra, to assess the availability of drinking water, gender segregated toilets, maintenance of toilets, action kit, etc., to study whether the children follow hygiene practices specially hand wash before midday meals, to assess the availability of drinking water and toilet for special needs children, to study what changes have been perceived in the perception of principals, teachers, students, parents and SMC members due to *Swachh Vidyalaya Abhiyan*, to assess how much this programme is contributing in quantitative improvement in the schooling process and to suggest suitable interventions for enhancing the effectiveness of *Swachh Vidyalaya Abhiyan*.

The questionnaires for the principals, teachers, and students were used for the study. The study was conducted in 104 rural and urban government schools in the districts of Maharashtra. Both elementary schools and secondary schools were included in the survey. Mostly they were co-educational schools ranging from Class I to Class X. The study reveals that Principals who have good leadership quality show more interest on sanitation and hygiene. Therefore, the role of principals is very crucial to the success of this campaign. During the survey, it was observed that nearly all the students were aware of the importance of washing hands before and after eating food as well as after using the toilet. But it was also observed that majority of the students were not washing their hands with soap.

When the students were asked about Global Hand Washing Day, majority of the students (81.2 per cent) did not know about the Global Hand Washing Day. 76.02 per cent of the schools were using tap water for hand washing followed by bucket (16.42 per cent), hand pump (7.46 percent). Soap was not readily available in the schools. When the students were asked as to what they did when soap was not available, majority of the students (59.52 per cent) stated that they complained to their principal when the soap was not available. 30.21 per cent of the students washed their hands only with water and 11.48 per cent of the students borrowed their friends' soap or liquid hand wash. 6.34 per cent of the students brought their own soap or liquid handwash. 60.73 per cent of students agreed that the main benefit of hand washing was to decrease infectious disease. 58.31 per cent of the students stated that the benefit of hand washing was to decrease diarrhoea. Indian toilets without flush were the most commonly available toilet facilities for boys and



girls students in the sampled schools. Majority of the schools were not using cleaning materials for cleaning the toilets.

Majority of the schools were not having rain harvesting system in their school premises. In majority of the schools they were not having sufficient funds for sanitation and hygiene. But more than 50 per cent of the schools were having sufficient fund for water management. When the teachers were asked whether they attended any training programme on sanitation and hygiene under *Swachh Vidyalaya Campaign*, most of the teachers (70.68 per cent) opined that they did not attend any training programme on sanitation and hygiene under *Swachh Vidyalaya Campaign*.

A Study of Networking among Teacher Education Institutions/Centers in terms of Functioning, Academic Programmes and Administrative setup of Bihar and Madhya Pradesh

The objectives of the research were to study the existing status of teacher education institutions/centers in terms of functioning, academic programmes and administrative setup of Bihar and Madhya Pradesh, and to study the horizontal and vertical networking among teacher education institutions/centers in terms of functioning, academic programmes, and administrative setup of Bihar and Madhya Pradesh. The research data were collected through a questionnaire and focus group discussions from 24 teacher education institutions/centers of Bihar and Madhya Pradesh.

The study proved that the SCERT, CTE, and DIETs of Bihar were not having Programme Advisory Committee (PAC). Hence, there were no such opportunities for horizontal networking between other institutions. All those institutions were in touch with other institutions under horizontal networking for various programmes and activities. It was also found that the majority of institutions shared various data with other institutions only through social media, like, e-mail, and WhatsApp.

The CTEs and DIETs have been benefitted in different areas related to educational programmes and activities through vertical and horizontal networking from NCERT, SCERT, Directorate of Research and Training, Bihar, PTECs, BRCs, CRCs, and schools. But, the lower level institutions (centers) were benefitted by only vertical networking with DIETs, BRCs, CRCs, and schools.

In the case of Madhya Pradesh, it was found that the SCERT, working under the *Rajya Shiksha Kendra* (RSK) prepares Annual Work Plan and Budget of educational programmes and activities as per MHRD guidelines. After the approval of AWP&B by the MHRD, the SCERT/RSK implement the programmes.

The CTEs and DIETs followed the RSK instructions, orders, and guidelines given by RSK. Institutions shared the information through MP Education Portal, but other resources, like human resources, infrastructure facilities, and repository of academic resources are shared very rarely with other institutions like DIETs, BRCs, and CRCs.

It is found that all the institutions were supporting and facilitating other subordinate institutions in various programmes and activities and also involving the persons who are working in subordinate institutions. All these institutions are facilitating and providing feedback to other higher institutions, like State Government, RSK, NCTE, NCERT (RIE), NIEPA, MHRD (Government of India), etc., about the implemented programmes and activities.



The study suggested that SCERTs and RSK need to develop yearly calendar for all the activities and programmes, and should frequently conduct sharing meetings and discussions, workshops within and between other institutions for creating better horizontal networking. The BRCs, DIET, (PPTI) and CTEs are demanding free internet facility with other ICT resources for creating better networking. These institutions are also demanding competitions and dialogues on different programmes and activities with other institutions for quality improvement of their institutions.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Analysis of Trends in ICT in Education

In all, 240 abstracts have been collected, analysed, and categorised. The Trends in ICT in Education is an on-going project of CIET, NCERT which analyses the trends of recent researches in the area of ICT in Education. The study involves collecting and reviewing the related literature and research papers, dissertations, and theses in the field. The various themes that emerged during the research were: (i) awareness and attitude of teachers in ICT implementation in school education, (ii) how accessibility of technology affects ICT implementation in school education, (iii) loopholes in ICT implementation in schools both from administrative and teacher's point of view, (iv) pros and cons of using digital technology in school education, (v) effectiveness of Computer Assisted Instruction (CAI) in Indian context, (vi) pros and cons of using digital technology in school education, (vii) ICT and Dynamics of Pedagogy, and (viii) Copyright/Intellectual property right and legal issues. It was found that ICT has secured an important place in school education in India wherein the teachers, students, and School Heads are actively using ICT to enhance their teaching, learning assessment, and administrative work. The report of the same has been disseminated digitally (<https://ciet.nic.in/pages.php?id=icttrends&ln=en>).

ICT integration for enhancing learning of secondary level students in Rajasthan

A study was conducted in various ICT facilitated schools of Umren block in Alwar district, Rajasthan. The study reveals the following:

- ❑ All the schools surveyed were of Higher Secondary level, but all of them had insufficient ICT — related infrastructure.
- ❑ All the teachers had the required academic and professional qualification with atleast 10 years of experience except ICT training. Only 15.0 percent teachers have attended five days basic training of ICT. Though 65 percent teachers were trained for using e-mail but, they lacked other ICT competency skills, such as conversion of text document into PDF, online text chat, and online video chat, online audio/video conferencing and online forum/groups and scan their computer files by using antivirus.
- ❑ Use of hardware and social media was commonly found among the teachers with more than 60 per cent of them coming under this category.
- ❑ Out of total, 77.7 per cent students had computer facilities and among them, 63.3 per cent, 5.1 per cent and 5.1 per cent access computer facilities from schools home and other places, respectively.



- ❑ 66.7 per cent students of sample school students avail facilities of TV sets at home.

A Study of the Status of Viewing Swayam Prabha DTH-TV Channel ‘Kishore Manch’ Among Students of Secondary, Senior Secondary Level, and Teachers

The research addressed the questions, like the accessibility and awareness of the channel, infrastructure for accessing the educational TV and the perception of teachers for educational TV. Data from educational functionaries, students, and teachers were collected from 18 States and UTs across the nation and 9 schools from two states. The findings of the study are as following:

- ❑ Among 18 States and UTs, majority of them have awareness about the SWAYAM Prabha project and *Kishore Manch*, but the accessibility of the channel was found to be nil in all the States, leaving Bihar which has access of SWAYAM Prabha due to the teacher training through the channel of NIOS. The identified reasons for unawareness were — difficult geographical conditions, unavailability of DTH at home, lack of infrastructure in the schools, lack of awareness about its existence, no provision of facility in schools to subscribe the SWAYAM Prabha channel and poor connectivity in *island* area by DoE.
- ❑ Regarding the accessibility of any other States and UTs educational television channel, it was found that none of the States has its own educational channel besides Rajasthan and Punjab, which have the content delivered through an ICT satellite Education and EDUSAT Network (ROT—Receive Only Terminals) respectively, but no availability of DTH channels. Almost all the States have planned to start the educational TV channels of their own, but they need support for infrastructure in remote areas also.
- ❑ In Haryana, the infrastructure for accessing the educational TV was found to be functional in 50 per cent schools, though they have the facilities of spacious room, computers, power backup, and internet. In case of Rajasthan, none of the facilities were available in schools.
- ❑ Perception of principals and teachers for educational TV/*Kishore Manch* Channels was found to be positive in terms of enhancement in the learning level of students; providing pleasant experience while watching, and developing individual interest in learning and enrichment in classroom teaching and learning.

A Study of Techno Pedagogic Analysis of Selected Media Programmes of Science at Secondary Level Produced by CIET

The research analysed the feedback of science programmes telecast on SWAYAM Prabha DTH TV, ‘Kishore Manch’ Channel. Data from 1600 (approx) students and teachers of three schools of Delhi has been collected. The science programmes that have been taken for the study are of Class IX and X. Data analysis has been done.

Third Party Evaluation of ICT@School Scheme in the National Capital Territory of Delhi

The study aims at evaluating the ICT interventions in the schools of NCT of Delhi. Data for the study was collected in two phases and in two modes i.e.,



online and physical survey. For online mode, PARAKH mobile app was used. In the first phase, online data was received from 603 schools out of 1228 schools. Interim report based on the preliminary data was developed and shared with the Directorate of Education, Government of NCT of Delhi. In the second phase, data was collected from 256 schools which was analysed further and report has been submitted.

The study indicates that though the establishment of infrastructure is somewhat satisfactory, there is a need to concentrate on certain aspects especially the human resource in terms of appointing ICT teachers in schools and training of the subject teachers and enhance their skills for content ICT-pedagogy integration as well as for the proper implementation of ICT@school scheme.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Counselling Skill Progression among the DCGC Students of RIE, Bhubaneswar

The study was taken up to assess the progressive growth of counselling skills acquired during the different phases in the DCGC programme organised by the NCERT at RIE, Bhubaneswar. Scoring rubrics was used to delineate a consistent criteria for grading the skills acquired at different phases of the course offered. The scoring rubric with a specified criteria developed on the basis of skills extracted through the narratives collected from the students was used to evaluate complex and subjective counselling skill progress. Tools like vignettes to collect narratives, observation schedule to document skill development, and identified indicators of counselling skills as checklist were used.

The study revealed that, to become a counsellor there is a requirement of imbibing skills which are not learnt by cramming and theoretical mastery. Counselling is a unique experience that is different from daily communication in social interactions. This has been revealed in this study wherein most of the participants have Post-Graduate level psychology background but did not display the counselling skill. It is not guaranteed that counselling skill will be easier to be learnt or inbuilt in any subject mastery. It was found that counsellors-in-training learn the art of counselling and they become aware of the necessity of using their skill to empower their clients.

Challenges Faced and Processes Adopted by Students with Visual Impairment to Learn Science at Secondary School

Review of research in the area direct towards the fact that students with Visual Impairment perform at par with their peers if given the opportunity. There are discrete examples of persons with Visual Impairment as successful scientists. Hence, the present study intended to find out the scenario of science learning among students with Visual Impairment at secondary schools with respect to their challenges and processes to overcome these challenges. The results point to the fact that students are interested to engage in science activities with support from their peers and teachers. Most of the students expressed their apprehension that they are incompetent due to their disability to engage in science learning. There is an urgent need to explore the support that could be provided to students with Visual Impairment so as to engage them in science



activities with confidence. Peer support is found to be the most economical resource that should be harvested to reap the best benefit. A whole school approach where acceptance of the fact that students with disabilities in general and those with Visual Impairment in particular are capable of learning science has to be developed.

Impact of Smart Classroom on Improving Teaching Learning Processes at the Secondary Level in West Bengal

The main objective of the study was to find out the availability, condition, and uses of smart classroom for teaching learning processes. Survey method was adopted with the sample of 25 schools selected by using multi-stage sampling technique from three districts of West Bengal. Self developed tools such as checklist, observation schedule, and group discussions were used for collecting data. The study found that majority of schools have smart classroom facilities but only 50 percent of teachers were trained in using smart classroom for teaching purpose. The effect of smart classroom on students learning was not visible as the smart classroom project has been implemented in the schools in 2017. It is suggested to orient all the teachers in using smart classroom effectively for teaching learning.

Pre-service Teachers Perception on Internship in Teaching Programme in Relation to Stream and Qualification: A Study

The research project was undertaken particularly to study the model prevailing in RIE, Bhubaneswar. The investigators developed a tool for taking feedback of four year integrated B.Sc., B.Ed.; B.A., B.Ed.; and two year B.Ed. teacher trainees of the institute to find the perception towards internship as a part of curriculum. The findings of the study showed incompatibility of internship schools and the students' current needs, teachers' lack of time, teachers' non-use of educational media, inappropriateness of teachers' scientific information with technology advancement, etc.

Implementing Interventions at the School Stage: A Block Level Research Project (Chilika Block, Khurda, Orissa)

Baseline Assessment Survey (BAS) was conducted in 119 schools from Class I–VIII of Chilika Block on 16 February 2019. Need analysis of all the teachers and CRCs from all 11 clusters of Chilika Block was undertaken from 6 March 2019 to 9 March 2019. School variables, such as physical infrastructures, teachers' characteristics, and parental characteristics were collected during the need analysis of teachers for implementing NCERT Interventions in Chilika Block.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

A Study on Implementation of CCE in Elementary Schools of Telangana State

The study was conducted with the objectives to evaluate the implementation of CEE at elementary level in Telangana State and to study the problems and issues related to the implementation of CCE in elementary schools. Survey method was adopted to collect the information from State and District level functionaries, teachers, and students. Multistage sampling technique was adopted in selecting districts, mandals, and members of the schools. The study



reveals that very few training programmes were conducted exclusively on CCE. CCE was only one of the sessions in other training programmes. Teachers were aware of formative and summative assessments but do not understand the purpose and spirit behind conducting these. Teachers found CCE as a burden which has taken most of their instructional time. Monitoring and supervision were carried out very superfluously as a routine. Some guidance to trainers was given in Cluster Level Headmaster's meetings held once in a month. According to the sources of Directorate of School Education, no improvement was seen in the teaching practices of teachers and similarly no progress was seen in the learner's achievement levels. The education functionaries at State, District, Mandal and Cluster levels were positive about CCE and wanted the scheme to be continued in Telangana State.

Implementing Interventions at the Elementary School Stage: A Block Level Research Project

The status study was conducted at block and sub-block level with the objectives to study the learning levels of students at the elementary school stage, hard spots of learning, level of participation of students in co-curricular activities, and affective concerns of the students to study the extent to which the ideas propagated by *NCF 2005* (e.g., gender concerns, inclusive education, art integrated education, multilingualism, use of ICT, CCE, child-centred as well as subject-specific pedagogies, school library facilities, guidance services, school-community participation, organisation of co-curricular activities, etc.), have reached and are being implemented at the school level, to understand the difficulties faced by teachers in their daily school work, to develop and modify the need-based interventions for teachers and teacher-educators which would focus on learners' achievement and their participation in curricular and co-curricular activities, teachers' difficulties; school climate and involvement of parents and communities in school functioning, to help teachers and teacher educators in implementing the interventions and to study if the sub district system and its functionaries have become better in their functions towards systemic reforms. The study was conducted among DIET faculty, CRPs, BRPs, school teachers, students, and community members of Hunsur Block.

National Achievement Survey question booklets were translated into Kannada and Urdu languages and was printed along with QR coded OMR sheets. The observers and CRPs were oriented about the conduct of Baseline Achievement Survey on 20 and 21 December, 2018 and BAS was held on 22 December, 2018. The data cleaning was done to check for any errors in OMR sheets and scanning activity was done. The answer keys are being verified and the scanned data is ready for further scoring and analysis.

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

Impact of Training Programmes Conducted by NERIE during 2010–2015

The objectives of the study were to assess the impact of the training programmes conducted by NERIE, Umiam during the period 2006–2013 with regard to the intended objectives, to identify the reasons for low impact if any and to suggest measures to make the training programmes more effective. The data were collected from eight North-Eastern States. The results showed that the



training programmes conducted by the institute were effective and relevant. Almost all the respondents felt that participating in the training programmes improved their teaching proficiency. The major difficulties reported were lack of proper communication regarding the programmes and short notice for the training. As regards the training materials that were provided, a few respondents reported that the materials were very theoretical and lacked examples and illustrations at times.

Causes and Consequences of Teenage Motherhood and Primary Prevention for at-risk Populations (under NPEP)

The objective of the research was to understand the reasons behind teenage pregnancies. Once understood, effective interventions will be planned to arrest the rate of teenage motherhood. Results showed that most respondents were 'happy' with their motherhood. Dropout was found to be a cause of motherhood. Not being engaged in meaningful activities and being left uncared for when the parents were at work, could be a reason for high incidence of teenage motherhood which needs to be investigated further. High incidence of teenage motherhood could also be caused due to relatively higher level of social tolerance for it. The respondents showed lack of awareness about the health risks (birth weight, premature birth) of early motherhood and had less awareness about child rearing.

A Study of Children with Learning Difficulties and Support Systems Available in the Elementary Schools of Nagaland

The objectives of the programme were to identify the children with learning difficulties in the elementary schools of Nagaland, to study the enabling factors available for children with Learning Difficulties in learning process at elementary stage and to study the support systems available for children with learning difficulties in the elementary schools of Nagaland. A meeting for the finalisation of the research tools viz., checklists for identifying children with learning difficulties and support systems for educating children with learning difficulties was organised at NERIE, Umiam on 25–26 September, 2018. The sample selected for the study was 99 elementary schools and 711 students from 10 districts of Nagaland. The study revealed that around four percent of students studying in government schools at elementary level were having learning difficulties whereas in private schools, it was only 0.26 per cent students facing learning difficulties. Also, it was found that maximum of the schools at elementary level in Nagaland were not equipped and did not provide required supports to children with learning difficulties in terms of infrastructure, teaching learning process, other educational support, support for equality, transition and moral and emotional support.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Study of Difficulties in Learning Chemistry among Prospective Teachers of B.Sc., B.Ed. Programme

The objectives of the research were to study content related learning difficulties in chemistry among four year B.Sc., B.Ed. prospective teachers; to study the difficulties experienced by prospective teachers in performing practical skills in chemistry laboratory; to identify possible alternative conceptions related to the



learning difficulties of prospective teachers; and to suggest learning strategies for dealing with the alternative conceptions and difficulties in chemistry. The sample of the study constituted 80 trainees from first year and 65 trainees from second year of B.Sc., B.Ed. programme of RIE, Ajmer which was selected by purposive sampling technique. A test paper was developed for the study which contained 45 objective type questions from different topics of chemistry course for first and second year. The research findings suggest that the main learning difficulty faced by the students is in understanding Schrödinger Equation and its application, the concept of Nucleophilic reaction, and energy aspects in Thermodynamics. The students also face difficulty in interpretation of graphical data and numerical calculations.

Learning Outcomes of Children with Intellectual Disabilities: Exploring the Determinants in Inclusive Classroom

The objectives of the study were to find out the determinants of learning outcomes of children with intellectual disabilities in inclusive setting at primary level and to explore the existing pedagogical processes and classroom climate leading to learning outcome in inclusive setting at primary level. The sample constituted 30 children with intellectual disabilities from five inclusive schools of Ajmer, Agra, and Lucknow selected by purposive sampling technique. A tool was developed by comparing with the learning outcomes checklist of Class I to V of NCERT. The research findings suggest that at least 20 per cent items of mathematics need to be modified and/or reduced for students with mild to moderate intellectual disabilities. The research also suggests that the facility of resource room or supplementary services in regular schools need to be provided for mathematics and language. Apart from this, the revised instructions on exemptions and concessions being extended to differently abled should be implemented at upper primary level with required modifications to support the study of children with intellectual disabilities.

Effectiveness of Flipped Classroom on the Learning of Concepts of Physics at the Senior Secondary Level

The research study was conducted with the objective of identifying and developing various resources for flipped classroom and to find out the effect of flipped classroom on the learning of physics at senior secondary level. The sample of the study comprised 30 students of Class XI of Demonstration Multipurpose School RIE, Ajmer. Two chapters (Motion in a Plane and Laws of Motion) from NCERT Physics textbook of Class XI were chosen for the flipped classroom strategy. Online resources were identified on these chapters. The assessment of the groups were carried out through a pre-test and post-test. It was found that the flipped classroom had positive effect on students' understanding of concepts of physics. Non-availability of internet access to many students at home was however an issue which needs further attention.





4. Development Activities

The development activities of the Council for year 2018–19 include development of preschool curriculum, credit based ECCE curricula, online courses, e-Contents in all areas of school and teachers education, guidelines on Continuous and Comprehensive Evaluation, audio-video programmes, resource package for awareness in ECCE, experiments and activity books, exemplar bridge course for Out of School Children, handbooks for teachers working in Special Training Centers (STCs) for Out of School Children (OoSC), activities, games, toys and art forms, resource materials, index for inclusive schools, roadmap for quality education for children residing in difficult terrains, comprehensive ECE Kit, video guide on the use of upper primary science kit, Learning Outcomes for secondary stage, Common Minimum Programme (CMP) for value education in schools, vocational interest inventory, practicum handbook of diploma course in guidance and counseling, textbooks in biotechnology, computer science, informatics practices, training packages in chemistry, physics, and biology, tactile kits in science and mathematics, teacher's guide, material on women in Quit India Movement, supplementary reading on human rights, trilingual dictionary of political science (English, Hindi, Urdu), teachers' manuals, course material of diploma in vocational education and training, student workbooks, curriculum for 'Meet and Greet Officer', training manuals, exemplar package on Learning Outcomes, training package for in-service teachers on Technological Pedagogical Content Knowledge (TPCK) in science, manual for Training Needs Analysis (TNA), etc.

DEPARTMENT OF CURRICULUM STUDIES

Review of Vocational Education Textbooks

The department has coordinated the task of review and publication of vocational education textbooks for various job roles from Classes IX–XII. These textbooks were developed by PSSCIVE, Bhopal and sent to Department of Curriculum Studies for review and finalisation for publication. Textbooks of various job roles in the sectors of Retail, Agriculture, Beauty and Wellness, Apparel, Mad-ups and Home Furnishing, IT, Plumbing, etc., were reviewed.



Workshop on review of Vocational Education Textbooks of various job roles

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Textbooks in Biotechnology at the Higher Secondary Stage

As suggested by the MHRD, Government of India, and CBSE, the syllabus of biotechnology was developed for the higher secondary stage involving experts from different universities, colleges, as well as practicing school teachers. Based on the syllabus, development of the manuscript for the textbook of biotechnology for Class XI has been done. The draft textbook has been reviewed by experts and practicing teachers and is under printing. The development of Class XII textbook of biotechnology is in progress.

Textbooks in Computer Science at the Higher Secondary Stage

As suggested by the MHRD, Government of India, NCERT conducted a meeting with officials from NCERT, CBSE, KVS, and NVS for discussing the development of a textbook on Computer Science at the higher secondary stage. Accordingly, the syllabus was developed involving experts from different universities, colleges, as well as practicing school teachers. Based on the draft syllabus, the manuscript for the textbook of computer science for Class XI has been developed. The department is working on preparing the manuscript for the textbook of Class XII.

Textbooks in Informatics Practices at the Higher Secondary Stage

On the basis of the decision of MHRD, Government of India regarding the development of a textbook on Informatics Practices at higher secondary stage, NCERT conducted a meeting with officials from CBSE, KVS and NVS. As per the suggestions, the syllabus was developed involving experts from different universities, colleges, as well as practicing school teachers. Based on the draft syllabus, authors from different organisations were involved in the development of the manuscript. The final version of the manuscript was submitted to the Publication Division for printing. The department is working on preparing the manuscript for the textbook of Class XII.

Development of e-Content in Science for the Secondary Stage

One hundred and fifteen e-Content in science for secondary stage have been developed and submitted to CIET for uploading on NROER. These e-content have been made interactive, with inbuilt quizzes and documents. These are expected to improve the pedagogical range and also support the students and teachers in the teaching learning process. Some of these have been mapped to the QR codes of science textbooks for Classes IX and X.

Audio-Video Material based on Handbook on Understanding Science through Activities, Games, Toys and Art Forms at the Upper Primary Stage

In order to make teaching-learning of science interactive and interesting, a handbook on understanding science through activities, games, toys and art forms at the upper primary stage has been developed. The developed material needs to be presented through audio-video mode to facilitate the users for utilising the material with confidence. Therefore, scripts for some audio-video materials based on the developed handbook at upper primary stage have been developed. These programmes will enable the viewers to get an idea about how to integrate art, traditional games and other disciplines with teaching-learning of science.



Audio-Video Resource on Experiments and Activities in Biology at the Higher Secondary Stage (Class XI)

Thirty scripts of audio-video materials based on laboratory manual in biology at higher secondary stage have been developed. The audio-visual material on experiments in biology viz., morphology of representative type of bacteria, algae, bryophyte, pteridophytes, gymnosperms, angiosperms, plants and animal tissues, mitosis, modification of root stem and leaves, identification of inflorescences detection of protein carbohydrates and lipids, etc., help in understanding experiments and related concepts through ICT, facilitate practicing teachers to carry out the experiments supplementing hands-on approaches along with integration of ICT.

Audio-Video Resources on Experiments of Chemistry at the Higher Secondary Stage (XI Class)

Audio-video materials based on the laboratory manual in chemistry at the higher secondary stage have been developed. These materials were developed in view of the difficulties faced by the practising teachers in carrying out the experiments and activities. Around 28 experiments and activities have been developed in chemistry at higher secondary stage. These audio-video materials will facilitate students and practising teachers to carry out the experimental works supplementing hands-on approaches and integration of ICT.

Modules of Training Package in Chemistry for Teachers Teaching at the Higher Secondary Stage in Online Format

Three quadrants of modules based on training package in chemistry for teachers teaching at higher secondary stage have been developed. The topics covered in the module were—basic concepts in chemistry, chemical bonding, thermodynamics, chemical kinetics, coordination compounds, electrochemistry, reactive intermediates, inductive effect, electrometric effects, resonance, types of organic reactions and stereo isomerism.

Modules of Training Package in Physics for Teachers Teaching at the Higher Secondary Stage in Online Format

A need based training package for conducting face-to-face training programme for capacity building of teachers teaching physics at the higher secondary stage have been developed. A programme was taken up during the financial year 2018–2019 to convert the package into online format so that it can be disseminated widely through NROER. Three quadrants of the modules based on training package in physics have been developed on the different units of physics. First quadrant of the module has e-Text, second quadrant has assessment and third quadrant has web links related to the topic.

Modules of Training Package in Biology for Teachers Teaching at the Higher Secondary Stage in Online Format

A need based training package in biology for the teachers teaching at the higher secondary stage have been developed. The package includes those topics and concepts which teachers find difficulty to teach. The package suggests ways to transact difficult concepts in biology and provide some additional enrichment materials on such concepts. A programme was taken up during the financial year 2018–2019 to convert the material of the package into online format so that it can be disseminated widely through NROER. Three quadrants of modules



based on the training package in biology have been developed. First quadrant of the module has e-Text, second quadrant has assessment and third quadrant has web links related to the topic.

Tactile Kit in Science at the Upper Primary Stage

The tactile kit helps visually impaired students in performing activities in science and for better understanding of science concepts. The science textbooks of Classes VI, VII and VIII have been analysed and around 50 activities have been identified. These activities have been modified for visually impaired and low sighted students. Some of the modified activities have been tried out with visually impaired students. Various devices for performing these activities are in the process of manufacturing.

Tactile Books in Mathematics at the Upper Primary Stage

The tactile material for Class VI mathematics have been developed in collaboration with Centre of Excellence in Tactile Graphics (COETG), IIT Delhi. This book was released on 1 September, 2018. The tactile book depicts the diagrams for different concepts of mathematics that would be useful for visually impaired and low sighted students. The department is in the process of developing tactile books in mathematics for Classes VII and VIII.

Tactile Books in Science at the Upper Primary Stage

The tactile material for Class VI science has been developed in collaboration with Centre of Excellence in Tactile Graphics (COETG), IIT Delhi. The book was released on 1 September, 2018. This tactile book includes tactile diagrams, which are raised and gives similar kinds of experience as sighted students to children with visual impairments.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Updated Version of the Index for Inclusive Schools

The main objective of the project was to update the index for inclusion already developed by NCERT in lieu of recent researches and developments in the area of inclusive education like RTE Act, 2009 and its Amendment, 2012, the Rights of Persons with Disabilities (RPWD) Act, 2016 and various new schemes like *Samagra Shiksha* after wide consultation with school staff, educational



Developing an Updated Version of the Index for Inclusive School

experts, educational administrators, school students, parents and community members. While developing an updated version of the index, the stakeholders were encouraged to share and build on their existing knowledge for removing all barriers to inclusion. The index was updated after an intense desk review, consultation with experts and stakeholders like headmasters, teachers, State inclusive education coordinators and parents, etc. It would be helpful for the States and UTs to guide the development of model inclusive schools that provide access to quality education to all children including Children with Special Needs (CWSN).

Roadmap for Quality Education for Children Residing in Difficult Terrains in the Country

The department has undertaken the developmental project with the objectives to understand the effect of the socio-political conflicts on quality education, the educational problems and needs of children residing in difficult terrains, the interventions and initiatives taken by the education department of the States and to prepare the educational roadmap for improving the quality of education. A questionnaire, an observation schedule and a schedule for focus group discussion were prepared. The researchers visited schools in Chaibasa, West Singhum district in Jharkhand, Chandel district in Manipur and Ramnathpuram district in Tamil Nadu during November 2018 to January 2019. Schools were identified by the State authorities and data were collected regarding various difficulties faced by children residing in the difficult terrains. The research team interacted with the teachers, administrators, SMC members, community members, parents and children. A five-day workshop was organised from 5 to 9 March, 2019 for the development of road map based on the experiences of the field visits in the three States. Resource persons comprised of academicians, sociologists, psychologists, experts, educationists and officers of the State education departments participated in this development workshop.

Audio-Video Programmes for Including Children with Special Needs in Teaching Learning of Science (Theory and Laboratory Work)

The project was based on the guidelines ‘Science beyond sight: Source book for inclusion’, developed in the year 2017–18. Fifteen scripts attempting to dispel myths associated with the abilities of children with visual impairments, inclusive lesson plans, organising and conducting laboratory activities using inclusive pedagogy practices, making laboratory accessible, ensuring safety inside laboratory were prepared. The prime clientele of the project would be regular teachers teaching science in inclusive schools and children with visual impairment studying in inclusive education settings.

DEPARTMENT OF ELEMENTARY EDUCATION

Online Certificate Course in Environmental Studies (EVS) for Primary Teachers

The programme is intended to help the primary teachers in understanding the objectives and pedagogy of EVS teaching learning. The online certificate course for teachers teaching Environmental Studies at the primary level will be launched on ‘SWAYAM’ portal, an initiative of the Government of India under the Digital India programme and other portals of MHRD and NCERT such as *e-Pathshala*, ITPD and NROER. The course outline and a blueprint



for each module were finalised, which was used to develop modules with web links for audios and videos, suggested readings and assessment exercises. All the modules and assessment exercises and assignments have been developed. Videos for eight modules have been developed and finalised.

e-Content in Teaching Learning of in Environmental Studies (EVS) at the Primary Level

The programme was aimed at developing e-Content in EVS for the students at primary level. The activities are additional teaching learning resource for children, which may be used by the teachers and parents to help children go beyond the textbooks and learn in a joyful manner. These activities are resources that will engage children both hands on and minds on as active learners. Sixteen videos and more than about forty-five scripts in mode H5p have been digitalised. All the activities are uploaded under QR coded textbooks.

Guidelines on Continuous and Comprehensive Evaluation

In tune with the RTE Act, 2009 norms of being the academic authority for the *Kendriya Vidyalayas* and for the UTs without legislatures, NCERT has developed guidelines on CCE. Accordingly, a draft for the same has been developed and shared with all the States, UTs, CBSE, KVS and JNV Sangathan. These were finalised after suitably incorporating the feedback obtained through distance and in a face-to-face mode through a national meet in which all States and UTs and experts from UNICEF, CBSE, KV Sangathan, NGOs, World Bank and different universities participated. The document is being printed.

Preschool Curriculum

The Preschool Curriculum has been developed which highlights the need and significance of preschool years and outlines the vision, aim and key objectives. The goals, key concepts, skills, pedagogical processes and early learning outcomes have been defined in a progressive manner. It also suggests ways of planning a preschool programme, classroom organisation and management, assessment tools, techniques, building, partnership with parents and community and supporting children's transactions to primary grades.



Resource Persons of the regional workshop on preschool curriculum and guidelines for the preschool education observing the play activities of children

Guidelines for Preschool Education

This document outlines the parameters for infrastructure, qualifications and salary of preschool staff, admission procedures, records and registers, monitoring and supervision, importance of coordination and convergence with community and parents for running a quality preschool programme.



Credit Based ECCE Curricula Leading to Certificate, Diploma and Advanced Diploma

A draft Credit Based ECCE curriculum has been designed for a certificate, diploma and advanced diploma in modular form. The advanced diploma will be for two years and will align with Diploma in Preschool Education of NCTE. The diploma will be for one year duration. The certificate course will be of six months duration and designed for administrators and teachers having DI.Ed. or BI.Ed. qualification.

Audio-Video Programmes on Good Practices in ECCE

Quality Early Childhood Care and Education (ECCE) programme has a great and positive impact on children's all round development. For improving its quality, different service providers (Government, NGOs and private sectors) have evolved their own innovative pedagogical practices including models, curriculum, TLM and teaching learning process, etc. Some have also modified their existing practices. In this connection, script of following five video programmes on good practices were developed and sent to the CIET for production.

The idea is to inform different stakeholders about already existing good practices through electronic media (video programmes) to reach out the masses as early as possible. This would help them to select any model or practice according to their own context.

Resource Package for Awareness in Early Childhood Care and Education (ECCE) Manual

With a view to spread awareness about right practices in Early Childhood Care and Education (ECCE), the 'Resource Package for Awareness in Early Childhood Care and Education (ECCE)' has been developed both in Hindi and English. Package consists of different kinds of print and electronic media such as posters, hoardings, banners, puppets, documentary film, etc. Later, a manual has been developed to guide stakeholders explaining each and every aspect of planning and executing awareness programme in the community. It has a description of the usage of material that is given in the package. It also contains three scripts (each in Hindi and English) that is 'Inhe Panapne Do', 'Khel Khel Main' and 'Sonu Ki Ulajhan' in Hindi; 'Let them Blossom', 'Learning Through Play', 'Sonu and His Confusion' in English. These scripts are created to disseminate meaningful messages related to ECCE practices through drama and role play in the community. Separate scripts are also provided for puppet shows. Along with the puppetry scripts, the package contains the characters of mother, father, girl and boy (puppets). Toward the end of the manual different annexures are given which has a sample registration proforma, feedback form, materials required and suggested programme schedule. The stakeholders can take it as it is or can refer it for planning such programmes. The feedback form which is given needs to be filled after the programme to know about the learning and responses of the programme.

Activity Books for Preschool Children

Activity books were developed for preschool children (3–5 years of age group). These books are helpful for teachers and parents dealing with preschool children in developing school readiness activities like vocabulary development,



fine-motor development, eye-hand coordination, cognitive skills, etc. The developed activity books are being used by children of IIT Nursery School, New Delhi.

Exemplar Bridge Course for Out of School Children

An exemplar bridge course for out of school children has been developed. The course has been divided into four levels. Barring the first level, which is a readiness module, all three levels are further divided into three stages and have a diagnostic test in the beginning and assessment at the end. There are three exit points, i.e., at Class II, V and VIII.

- Levels I – This is a readiness module which offers activities for matching, sorting, classification, grouping, etc. The activities are hands on and therefore children will enjoy doing the activities before they start the actual lessons.
- Levels II – This level aligns to the learning outcomes of Classes I and II. The subjects covered are English, Hindi and Mathematics.
- Levels III – This level aligns to the learning outcomes of Classes III to V. The subjects covered are English, Hindi, Mathematics and Environmental Studies.
- Levels IV – This level aligns to the learning outcomes of Classes VI to VIII. The subjects covered are English, Hindi, Mathematics, Science and Social Science.

For every level, in each subject there are five components—Diagnostic Test, Basic Stage, Intermediate Stage, Grade Appropriate and Assessment.

Handbook for Teachers Working in Special Training Centers (STCs) for Out of School Children (OoSC), Under RTE Act, 2009.

The objective of the handbook was to empower Teachers and Education Volunteers (EVs) with regard to various aspects of OoSC in Special Training Centers. The Right of Children to Free and Compulsory Education Act, 2009 provides free and compulsory education to all children from the age of six to fourteen years. Under Chapter II, section IV, of RTE Act 2009, a handbook to facilitate teachers and education volunteers to teach Out-of School Children in special training centres in States and UTs is being developed. This handbook comprises of five chapters—Introduction of RIE, Act, 2009, Psychological Aspects of OoSC, Identification of level of OoSC, Pedagogical Techniques for subjects and languages namely—English, Hindi, Math, EVS, Science and Social Science and Assessment. Effort has been taken to use this handbook as bridge course material by the teachers in STCs.

Resource Material for Children and Teachers for Primary Grades

Padhe Bharat Badhe Bharat, a document of the MHRD and the Learning Outcomes at the Elementary Stage highlighted the significance of resource material for children and teachers and also created a print rich environment in supporting language and literacy among students. The objectives of the programme were to develop print and non-print resource material to create awareness and to promote an understanding of early literacy in the context of learning outcomes of language and literacy; to collaborate with the States and other organizations to translate the developed material from Hindi and English to other Indian languages (including tribal languages); to provide resource material and input for teachers training programmes in Indian



Languages (including tribal languages) in addition to Hindi and English in States and UTs. Stories and poems have been developed and selected for primary grade learners. Some of the stories are folk tales of different regions of the country and connected to the immediate environment of children. Selected stories and poems are illustrated by the illustrators including folk artists. Integrated School Language Programme (ISLP) has developed video programmes on various issues related to language learning. A five-day workshop was organised from 21 to 25 January, 2019 for the sub-titling (in 6 languages—Bangla, Korku, Marathi, Nimadi, Bareli, Manipuri) of five video programmes on language and literacy.

DEPARTMENT OF EDUCATION IN LANGUAGES

Development of e-Content and Quick Response (QR) code

The programmes for developing e-Content and QR code have been taken up in Hindi, English, Urdu and Sanskrit language. The objectives of the programme were to provide relevant additional resources to the learners and teachers as well and to give learners hands on experiences of digital resources. The audio and video materials were developed on different



Participants in the workshop on Unicode Font Conversion for Digital Books

genres of literature for honing skills of language. Activities on contextualised grammar and vocabulary were created to facilitate the process of language teaching-learning and communicative competence.

Learning Outcomes for the Secondary Stage

Learning outcomes in all the four languages Hindi, English, Urdu and Sanskrit were developed to facilitate the teaching learning process at secondary stage in continuation of Learning Outcomes at Elementary Stage developed by NCERT. Learning Outcomes in Language are competency based so as to encourage and provide opportunities for learning beyond the textbooks. The inputs on ICT, class management strategies, collaborative learning, group and peer work were highlighted to achieve the desired academic goals.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

e-Contents in History, Geography and Economics

e-Contents have been developed in different subjects of social science and are available on NROER. Some e-Resources are prepared for facilitating additional reading on some topics, whereas some have been developed as interactive materials in the form of true-false, drag towards the correct option, Multiple Choice Questions, glossary, match the words, phrases, and some are based on map.



Health and Physical Education: A Teacher's Guide for Class VIII

The teacher's guide focuses on holistic understanding of health, physical education, yoga and fitness activities including the impact of environment on health. Experiential learning activities for acquiring skills for healthy living have been integrated to make it child-friendly in terms of pedagogy.

Material on Women in Quit India Movement

The material introduces women known and lesser known in the Quit India Movement. Textbooks of States including NCERT textbooks have been analyzed in the light of reference made to Quit India Movement. An Album is being developed highlighting important events, write ups, newspaper clippings, pamphlets, speeches and brief accounts of survivors of the movement.

Supplementary Reading on Human Rights

The material contains themes that focus on Meaning of Human Rights, Violation of Human Rights, Rights and Duties, Types of Human Rights, Conflict between Different Rights, National Human Right Commission. The material is developed for secondary and higher secondary stage.

North-East of India: People, History and Culture: Hindi and Urdu Versions

The supplementary reader on 'North-East India: History People and Culture' has been translated into Hindi and Urdu and submitted for publication.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS***Online Course for Professional Development of Secondary Teachers in Arts Education***

It is a certificate course having modules with several sessions packaged in quadrants as per the specifications of SWAYAM. Modules include the generic aspects of schools and their integration through arts whether its inclusion, gender, issues of adolescence, the pedagogy of teaching of visual and music arts and the exposure of outside world of careers, institutions, visits, etc.

Textbooks in Different Areas of Music—Class XI and XII

The department is in the process of developing textbooks in Music for Class XI and XII to facilitate students offering Music (different areas) as an elective subject at the higher secondary level. The four different courses in Music are: Hindustani Music, Carnatic Music, Tabla/Pakhawaj and Mridangam.

e-Content in Different Areas of Visual and Performing Arts

The department has been engaged in the development of e-Content in different areas of visual and performing arts till the secondary level of school education in collaboration with CIET. e-Content materials have been developed for art integration across curricular areas, knowledge of Musical forms like Dhrupad, Dhamar, videos of musical instruments and pedagogy of music in schools.



DEPARTMENT OF GENDER STUDIES

Transformatory Material for Awareness Generation and Attitudinal Change with respect to Gender

The concern for gender equality and sensitisation in and through education, especially in classroom spaces, is critical because of the far-reaching implications that gender disparities and inequities (reflected through biases, stereotypes and discriminatory practices) have for educational interventions. The attitude of teachers also plays a major role in the personality development of children hence, needs to be totally unbiased. Teachers need to be effectively equipped to unlearn their own given assumptions regarding norms, values and ideals. Other than teaching-learning material they also need to have other kinds of transformatory materials that could address a variety of issues related to gender to create awareness as well as help in attitudinal change. Such material is likely to impact perceptions of teachers and teacher educators and how they project their own attitudes, beliefs and practices in the classroom and beyond.

The main objectives of the programme are to identify issues necessary for bringing attitudinal changes with respect to gender and to develop transformatory material in the form of booklets. The relevant themes / issues for development of material have been identified and finalised in a workshop in which resource persons from institutions and organisations such as Jamia Milia Islamia, New Delhi, Aditi Mahavidyalaya, DIET, Jagori as well as artists participated.

EDUCATIONAL SURVEY DIVISION

Videos and Manual on use of Case Studies and Activities in Teaching Learning of Economics and Senior Secondary Stage for Inclusive Classroom

A comprehensive package for teachers on selected topics in economics at senior secondary stage with focus on students with Visually Impaired and Hearing Impaired in inclusive settings has been developed. The package aims to facilitate understanding amongst teachers to teach economics at senior secondary stage to all the students including VI and HI and create enabling conditions for students with VI and HI to opt for economics at senior secondary stage through building confidence and competence of teachers. The videos' editing work is in process in CIET and Manual is with IIT Techno Park, Sonipat for printing.

DIVISION OF EDUCATIONAL KITS

Production of Comprehensive ECE Kit

Comprehensive ECE kit have been prepared and production friendly design of each kit items have been developed.

Video Guide on the use of Upper Primary Science Kit

Manuscript for developed video guide has been finalised and submitted for CIET for video production.



Manual of Geography Kit in English and Hindi

Based on the Geography kit, the manual for use of Geography kit items and performing activities of Geography at upper primary and secondary stage have been developed in English and Hindi.

LIBRARY AND DOCUMENTATION DIVISION

Workshop on e-Resource Management and Web based Library Services for the Library Staff of NIE and its Constituent Libraries

The objectives of the programme were to create awareness about e-Resource management (procurement, organisation, dissemination) and web based library services among library staff of NIE and its constituent libraries; to equip library staff with new technical skills knowledge and competencies for procurement, organisation and dissemination of e-Resources and the web based library services and to train the librarians in procurement of e-Resources and application of Web 2.0. There were total 23 participants from CIET, RIE, Ajmer, RIE, Bhopal, RIE, Bhubaneshwar, RIE, Mysuru, and DM Schools were trained on procurement of e-Resources, its licensing, negotiation, access policy and procedures e-Resource management softwares, implementation of e-Resource management in libraries creation of institutional repository, etc.



Workshop on e-Resources management and web based library services

RMSA PROJECT CELL

Learning Outcomes for Secondary and Senior Secondary Stage

Learning outcomes for secondary stage have been developed in languages subjects of English, Hindi, Sanskrit, Urdu, Science, Social Science, Mathematics, Art Education and Health and Physical Education. The draft document '*Learning Outcomes at the Secondary Stage*' comprises of Curricular Expectations; Pedagogical Processes; and Learning Outcomes. The illustrative pedagogical process adopted and adapted for developing the required competences in the document will help teachers in using appropriate teaching learning practices.



Training Package for In-service Teachers on Technological Pedagogical Content Knowledge (TPCK) in Science for Secondary Level

Technological Pedagogical Content Knowledge is a framework that tries to identify the nature of knowledge required for teachers to focus on teaching effectively with technology. The training package would help the in-service teachers to acquire skills of integration of technology, pedagogy, content in teaching of science. The package includes modules on content knowledge, pedagogical knowledge, technological knowledge and integration of all the three in the classroom teaching. The main objective of the package is to equip secondary school science teachers with various knowledge structures and facilitate them in integrating while teaching science in general and design and develop a lesson plan based on TPACK in science in specific. The draft package was tried out in a five-day training programme wherein 27 secondary school science teachers from 11 States have participated. The training package was modified and finalised based on the feedback received from the programme.

Manual for Training Needs Analysis (TNA) for the Conduct of In-service Teacher Training Programmes

Considering importance of TNA in training programmes, RMSA Project Cell, NCERT took initiative to develop a manual for analysis of the training needs for conducting in-service teacher training programmes at secondary level. Main objective of the project was to develop easy-to-use manual with step by step instruction for conducting need analysis of secondary school teachers. Inputs were collected in a meeting with the State representatives engaged in carrying out in-service teacher training programmes, State Coordinators from various Regional Institute of Education and other experts. The manual was drafted involving teachers, teacher educators, administrators and subject experts. The content of the manual include:

- ❑ Chapter 1: What and Why TNA;
- ❑ Chapter 2: Process of conducting TNA includes steps to conduct TNA-Identify problem, determine design of needs assessment, sampling, institutions involved in conducting TNA, development of tools, collection of data, analysis of data and drawing implications.
- ❑ Chapter 3: Tools and techniques—content analysis, performance analysis, teacher assessment, student assessment (questionnaires, rating scale, check list, observation schedule, interviews, FGD), guidelines to develop, administer and analyse
- ❑ Chapter 4: Data analysis and interpretation
- ❑ Chapter 5: Implications-needs identified; training and non-training interventions and road map for policies and programmes of teachers training

Tryout of the manual was done in collaboration with SCERT Chandigarh. Performance analysis of students and teachers was carried out through analyzing NAS results and classroom observations respectively. A questionnaire and focus group discussions with teachers and interviews with Headmasters were also used. In the light of results of the pilot study, the manual has been modified.



DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Common Minimum Programme (CMP) for Value Education in Schools

Education to be truly meaningful needs to address the concern for holistic development of children. It should promote capabilities, attitudes, and skills that matter not just in schools but throughout life. In order to meet these goals, the MHRD, Government of India organised consultations at regional and national level. The National Consultation 'Chintan Shivir' was held at AICTE, Campus, New Delhi on 6–7 November 2017. Extensive deliberations were held by core groups comprising policy makers, educators, and NGOs on five areas, namely, Digital Learning, Physical Education, Value Education, Life Skills and Experiential Learning. The core group on value education was entrusted with the responsibility to develop a Common Minimum Programme (CMP) for Value Education in Schools. The Constitutional values sub-divided into related values of Justice (responsibility for self and others, critical thinking, fairness); Liberty (freedom with responsibility, courage, compassion /concern for others, respect for all faiths and forms of worship); Equality (non-discrimination, protection of disadvantages and inclusiveness); and Fraternity (respect for human worth and dignity, appreciation and respect for diversity, sense of brotherhood/ belonging, cooperation and collaboration) and the Whole School Approach (WSA) formed the basis for developing the CMP. The CMP has been developed in five sections – Introduction, Creating School Ethos for Value Education, Constitutional Values in School Context, Community Participation, and Assessment. To help teachers integrate value education, in different subjects the four Constitutional values in the textbooks of NCERT have been identified and exemplars integrating different constitutional values at all stages of school education have been given. A complete action plan was also developed for helping/assisting school leadership to understand the process of the CMP. As per their suggestions, improvements were made in the document and finalised. At the end of the document, an Exemplar Action Plan is given which is developed on an identified concern and need of the school, i.e., bullying. The action plan helps to delineate steps and actions which would facilitate creating bullying-free school by integrating Constitutional values.

Vocational Interest Inventory

Interest inventory was developed for use of counsellors to assist in guidance and vocational choice of school students at secondary and senior secondary stages. The interest inventory covers seven dimensions viz., artistic, scientific, investigative, social services, influential, office management, nature, environment and ventures. Each dimension consists of sub-dimensions which focus on measuring the person's broad areas of interest. Items were developed and finalised after undertaking try-out of items, seeking expert opinion and field testing. The final version of the interest inventory consists of 144 items. The inventory is standardised on 1680 boys and girls studying in Class IX (N=719) and Class XI; science stream (N=322); commerce stream (N=330) and humanities stream (N=369) of eight Kendriya Vidyalayas in Delhi. The manual



includes procedure for administration of the interest inventory, scoring, norms and interpretation of interest scores.

Hindi Translation of Practicum Handbook of Diploma Course in Guidance and Counselling

To make available the practicum handbook in Hindi for trainees of the Diploma Course in Guidance and Counselling from the hindi speaking regions, the practicum handbook was translated into hindi. For this, initially, a glossary of technical and psychological terms was prepared which were later used during translation of the practicum handbook. The translated practicum handbook was reviewed and finalised for dissemination among trainees of the Diploma Course. Hindi version of the practicum handbook was also uploaded on NCERT website.

DEPARTMENT OF TEACHER EDUCATION

Guidelines for Teacher Performance Assessment and Sharing with States and UTs

As approved by PAB of MHRD, for the year 2018–19, Department of Teacher Education has developed draft guidelines along with tool for assessing the performance of teachers titled 'Teacher's Self-Assessment'. An initial draft of guidelines along with tool has been developed through a series of workshops. The draft tool with 41 performance indicators and descriptors for each has been prepared. A workshop was conducted at NIE, New Delhi on 19–20 November, 2018 in which 24 teachers from primary to senior secondary level participated. Further, it was tried out in a larger sample covering 185 teachers from State board schools, KVS, NVS, DMS and private schools. The feedback in the form of comments and suggestions received during the workshops and try out were used for improving the guidelines and rubric.

Continuation with this, the department has organised three regional consultative-cum-sharing workshops with States and UTs to share the draft 'Teacher Performance Assessment Guidelines and Rubric' with stakeholders. Based on the feedback, the department has finalised the guidelines.

Guidelines for Effective Implementation of Internship Programme for Diploma in Elementary Education (D.El.Ed.) in Hindi

The Internship Programme based on NCTE Regulation, 2014 can play an important role in preparing professional students-teachers to work in schools. Department of Teacher Education, NCERT has developed guidelines for D.El.Ed. School Internship Programme, keeping in view the Contours of Guidelines (2016) of School Internship developed by NCTE and particularly need for the hindi speaking States.

During the internship, the students-teachers will be in the field for 20 weeks, visiting different schools and get opportunities for interacting with students, teachers, school heads, school management committee members, parents and other supportive staffs of the school, etc. An opportunity will be given to students-teachers so as to interact and study the school environment, maintenance and update status of various documents in the laboratories, library, etc. On the other hand, an opportunity will be provided to the student-teachers to conduct case



studies, action researches, subject or problem based project works, etc. to use knowledge of theoretical subjects in a practical way. Therefore, this internship programme enables the students-teachers to become professional teachers.

The guidelines have been developed on the basis of above all these aspects. The guidelines mainly focus on the questions—What is school internship? How should a teacher education institute prepare a plan for school internship? What should be the School Experience Programme for the first year and how it should be conducted? How to conduct practice-teaching and community work (Internship) in the second year? In addition, based on the activities to be undertaken during the internship, some formats have been given. These may be useful to all the stakeholders.

PLANNING AND MONITORING DIVISION

Annual Report of NCERT, 2017–18

Annual Report of NCERT provides a complete picture of the achievements and activities including the account statement of the past year which is placed before the parliament by MHRD. It is discussed and approved at the meeting of Executive Committee and General Council of NCERT before placing in the parliament. The achievements and activities of the Council are placed under the headings of major publications, research studies, development activities, capacity building programmes, extension activities, major schemes and visitors to NCERT. Annual Report of NCERT for the year 2017–18 was prepared on time and it has been placed in the Executive Committee of NCERT held on 5 January, 2019.

The MHRD prepares Annual Report for current year in which inputs from NCERT are also submitted. PMD collects material from all the constituents of NCERT, compiles and consolidates for submission to the ministry for inclusion in the Annual Report of MHRD. The material for the year 2018–19 has been consolidated and submitted to MHRD.

Designing and Development of e-Content for Online Course on Instructional Strategies for Mathematics and Statistics in Economics

In view of equipping economics teachers with the mathematical expressions and statistical tools used in economics textbooks at higher secondary stage and on various innovative transaction methods an instructional material for initiating an online course have been developed. This course is expected to help the participants in acquiring the analytical skills required to use the mathematics and statistical tools in economics. In this approach, participants get opportunity to practice the application of the analytical and quantitative skills through the medium of selected topics. Online support to the participants will be provided through supplementary and enrichment lectures for offline learning, access to open resources, assignments, workout problems, etc., which will help the teachers learn at their own pace. It will help in reaching out to large number of teachers and enable them to transact the economic theories using mathematical expressions efficiently in the classroom. Additionally, the credits acquired will add to the professional development of teachers. The course design, module and the pedagogical approach to be followed have



been finalised. The e-Content in the four quadrants as in MOOCs have been developed. The course will be piloted in 2019–20.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)

e-Resources for School and Teacher Education

CIET, NCERT develops e-Content through multiple modes that cover the entire syllabus of NCERT for all stages of school education. It caters to students, teachers, teacher educators, parents at all levels of school education and teacher education. These e-Contents include images, audios, videos, interactives, graphics, animations, digital books, timelines, digital maps, etc., for dissemination through transmission and non-transmission modes.

The audio team produced 508 programmes while the video team produced about 300 programmes. The subjects covered under these programmes range from English and Mathematics to Art. This year the focus was on designing interactive multimedia package. Seven illustration based stories on Hindi textbooks of Classes IV and V were developed for video production and multimedia package. Also, 10 scripts in Physics for Class X were developed which are to be converted into animation programmes. The guidelines for e-Content development was also designed which was discussed and disseminated. Under the MOOCs on SWAYAM, text modules 132 videos have been developed for 11 MOOCs. The text modules of Physics courses have been updated. A comic book was developed in collaboration of PCRA on the theme of save energy.

Online Certificate Course on Research Methodology in Education

A planning meeting for the course was organized during this year. The course structure was prepared for 19 modules. Detailed outlines have also been prepared for development of the modules and the modules are under different stages of completion. Broad outlines for video programs have also been designed for supplementing the modules.

CIET Newsletter

CIET's Newsletter has been regularly compiled and published in CIET's website on a quarterly basis. For the year, four issues; April–June, 2018, July–September, 2018, October–December, 2018 and January–March, 2019 have been compiled and published. The newsletter includes summary of all the works done by the institute in its PAC and PAB proposals along with any other activity taken up by CIET. It also enlists the activities in which the faculty members of CIET were engaged for their professional development, publications they had and awards that any member of CIET have received. The informations are supplemented with photographs for reference.

Educational Media Programmes

In all, 237 audio and 1397 video programmes were developed. Regular weekly preview meetings were held for inviting suggestions for improving the produced programmes as well as for programmes to be recorded, further. Textbooks are also been converted into audio books for working for inclusive education and 50 Audio talking books have been developed. All the programmes developed and previewed were disseminated through telecast on Ch #31 *Kishore Manch*,



Web portals (NROER, e-Pathshala and SWAYAM), mobile app, through sales mechanism and various exhibitions, etc.

Textbook on ICT at the Secondary Stage (Class X)

The textbook of ICT for Class IX have been published e-Resources for QR codes in textbook for Class IX were developed and mapped. Similarly the syllabus of ICT for Class X and manuscript of the textbook for Class X has been finalised. The textbook on ICT for Class X is under publication. This textbook aims to develop skills among students to organise, process and analyse the data. It will orient them on the potential of the internet as well as the safety and security issues. This will also help the students understand how to safeguard against malicious activities and incidents, and to encourage responsible and constrictive on-line participation. It intends to raise awareness about the societal and environmental impacts of ICT. Further, the textbook gives an idea about the use of ICT in learning different subjects with inter-disciplinary approach.

Model for ICT Integrated School System

Four phases of refresher course on ICT-pedagogy integration conducted for DMS teachers were conducted. The course was conducted through online portal (LMS) <https://itpd.ncert.org.in/> and the course platform and functionality was also tested simultaneously. Since DMS, Mysuru has been selected to participate in School Online Programme by MASHAV, Government of Israel, a collaboration project between DMS, Mysore and Ohel School, Israel was done on-line mode. During this, there were on-line discussion on culture of India and Israel and information on the same was exchanged between the two groups. Forty FOSSs were also integrated in chrome book for further usage and certification to teachers. Workshop was also organised in collaboration with Google for ICT coordinators of RIE and DMS.

ICT Integrated Curricular Activities for Students

Course content for Class VI and VII for ICT in Education course has been completed. Course contents are being implemented for 13,000 students across 22 schools of Vivekananda Education Society in Tamil Nadu. Customisation of book was also done by their school teachers in order to enhance its usefulness. Student course content for year I and II was shared with Karnataka and the State team is in the process of translating it in Kannada. Andhra Pradesh is implementing the student curriculum-based on the recommendations of NCERT with the support of Chrysalis. Curriculum-based activities were also identified for Class VI and VII for further development.

Course content for first year has been completed and the translation of course in Kannada has been initiated. Student course content is being implemented for 30,000 students (Class III to X) across 22 schools of Vivekananda Educational Society across Tamil Nadu. A customised book for Classes III to X have been developed and distributed to all students. Around 230 ICT activities have been identified for Class VI to X. These activities are published on the ICT curriculum portal (<https://ictcurriculum.gov.in/course/index.php?categoryid=29>).



ICT in Education Curriculum for Teachers and Teacher Educators

Refresher 1 (ICT in teaching learning 1) and 2 (Digital Storytelling) were combined as a single course and titled as ICT Pedagogy integrated in Teaching and Learning. Course outline and the activities were developed in a workshop mode and published online (<https://ictcurriculum.gov.in/course/view.php?id=20>.) Rubrics for assessing the e-Portfolio activities of Induction—level 1 was developed and shared with Karnataka. Area to be included in the course on ‘Social, ethical legal and technical aspect of using ICT’ was identified in collaboration with CDAC, Google, Cyber Peace Foundation and Facebook through a virtual workshop. ICT in Education Curriculum for Teachers V.01 of Assam was developed and published online.

REGIONAL INSTITUTE OF EDUCATION, AJMER

e-Resources for the School and Teacher Education

More than 40 e-Content, audio-video programmes, for school education for the subjects like physics, chemistry, mathematics, and English have been developed. During the year, 12 audio-video programmes were sent for 23 All India Children’s Educational Audio-Video Festival and ICT Mela 2018–2019 organised by NCERT. Teachers were also oriented on how to develop e-Content audio-video programmes and more than 35 e-Content videos have been recorded and 20 scripts were ready for shooting.

e-Content on Experiments in Chemistry using Microscale Kit at Senior Secondary Stage

The package was developed with the objectives to imply the principle of green chemistry laboratory at senior secondary level, to develop e-Content in chemistry laboratory experiments at senior secondary level using micro scale chemistry Kit, to identify gaps (if any) with respect to e-Content in developing experiments at senior secondary level in chemistry and to select appropriate media for the development of e-Content wherever required. All the experiments in chemistry at senior secondary level were covered for development of e-Content using micro scale chemistry kit. The package includes introduction about micro scale chemistry kit, experiments developed for senior secondary classes, qualitative inorganic analysis and functional group analysis.

Exemplar Package on Learning Outcomes in EVS and SCIENCE at Elementary Level

The package contains 37 modules including nine on EVS and 28 on science for the Classes VI to VIII. The effort has been made to provide modal lesson plans and strategies to facilitate learning of EVS and science concept at elementary level so as to ensure maximum attainment of learning outcome by the children.

Muskurata Bachpan: An Early Child Education (ECE) Programme

It is an early childhood education (ECE) programme running in Demonstration Multipurpose School at RIE, Ajmer from the year 2009. The main objective of this programme is to prepare children of the age group of 3-5 years for the entry primary school. A total number of 36 children were enrolled in the year 2018–2019 including 19 children in Level I (3 to 4 Years) and 17 children



for level II (4 to 5 Years). The major activities for children included: drama, manipulation, block building, play, puppet, writing and reading for children discovery, development of teaching learning materials, sensory training activities and enhancement in motor activities.

Environmental Education Theme Park

The objective of theme park is to promote environmental awareness through an interactive way and to bring school children youth and teachers to a forum where they can discuss their perspective on the environmental issues. The theme park consists of aquatic, desert and terrestrial ecosystem. A medicinal plant conservatory has also been created for demonstration for the visitors. The rainwater harvesting system is also developed for the conservation of water and soil organic farming, etc.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Curriculum Development and Establishment of Lab in Mechatronics at DMS, RIE, Bhopal

The programme was initiated to develop curriculum for Mechatronics Vocational Course to meet industrial requirement, to plan and implant state of art workshop and laboratory for crystallisation of desired goals and to access technical aptitude among students. The curriculum has been designed in collaboration with Korean team and the corresponding laboratory on Mechatronics has been proposed to establish in DMS, Bhopal in coming session.

Development of Science Park

The science park was developed to create awareness about role of science and technology in everyday life, to promote understanding of basic principles through working models and exhibits, to demonstrate the application of scientific principles in day-to-day life, to impart practical training to students and teachers of pre-service and in-service programmes, to provide facilities for hands-on-experiences to children, teachers and teacher educators through learning by doing, to inculcate scientific temper and spirit of inquiry among the students, to generate new knowledge through investigating project works, to build linkage between science and society and to enrich the flora and fauna of the institute.

Development of ICT Integrated Training Package with Constructivist Approach Senior Secondary Mathematics

In order to develop the ICT integrated training package with constructivist approach, mathematics textbook at senior secondary stage was analysed to identify space for the development of constructivist learning strategies. On the basis of it, the package has been developed. It helps mathematics teachers to develop their pedagogical skills, use innovative practices in teaching learning process, to develop competency in using mathematics resource centre, to use local specific materials and activities for making mathematics teaching lively and to creating a space for recreational mathematics during classroom transactions. The package has been developed.



Establishment of a Resource Centre for Arts and Crafts at RIE, Bhopal

The research centre is established in the institute to provide opportunities and resources to students, teachers, teacher's educators and members to explore experience and understand arts and crafts and its place in education. It provides opportunity to integrate arts and culture in schools and teacher education institutions and also promotes local and regional art forms by bringing it into the formal education system. Traditional arts and crafts of Madhya Pradesh and Chhattisgarh was collected and displayed in the resource centre.

ICT Integrated Teaching-Learning Materials on Gujarati Language and Training to KRPs

The programme was initiated with the objectives to develop ICT enabled teaching-learning materials in Gujarati Language, to provide training to the KRPs of Gujarati language on ICT enabled teaching-learning materials and to provide training to the KRPs about how to utilize the resources available on the web. The package on ICT integration for teaching Gujarati language has been developed.

HandBook for Key Resource Persons (KRPs) on Global Citizenship Education (GCED) and Education for International Understanding (EIU)

A handbook on Global Citizenship Education (GCED) and EIU has been developed to propagate the idea of the concepts of GCED and transformative pedagogies. It helps the learners to actively involved in the learning process that facilitate interactive and student-centered classrooms and a process of learning which is responsible and autonomous to strengthen practical skills to design and implement EIU and GCED programmes tailored to respective local context.

Curriculum and Course-ware for Career Education Programme

The curriculum and course-ware for upper primary stage on pre-vocational education have been developed in collaboration with Korea. The curriculum has also be designed on Beauty & Wellness along with a development of related laboratory in DMS, Bhopal in collaboration with Korean team. This course is proposed to be launched from coming session.

Improvement of Writing Skills in Marathi Language at the Secondary Level in Maharashtra State

The programme was initiated to identify the level of Marathi writing skills of students at secondary level and to sensitize the teachers for inculcating and nurturing the Marathi writing learning skills of the students. The package has been developed to improve the writing skills of students in Marathi language.

Institutional Repository of RIE, Bhopal

The institutional repository at RIE, Bhopal promotes wider on-line access and visibility of research output of RIE, Bhopal and preserves these digitally for long-term access.



REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Training Material on Integrating ICT in Education at the Secondary Level in Jharkhand

The main focus of the material is to orient secondary school teachers in the process of integrating ICT in Education. This training material consists of 11 modules on the themes like understanding basics of ICT, working with MS Word, MS Power Point, MS Excel, uses of internet in teaching learning, e-Content and OER, ICT for assessment of learning, ICT for professional development and MOOC, mobile based applications for learning, emerging trends in ICT and national and international initiatives for ICT in education. All the modules are designed and developed in transactional model, where theoretical explanation as well as activities are suggested for transacting the module.

D.El.Ed. Curriculum for the State of Jharkhand

The programme is structured into different stages of activities i.e., need assessment of teacher education curriculum of Jharkhand State and workshops for development of first draft of the curriculum, editing and finalization of the curriculum. Throughout the activities, inputs from the State were taken into consideration in the form of meeting with stakeholders and workshops wherein resource persons were involved from Jharkhand. Different framework and policy documents like National Curriculum Framework 2005, National Curriculum Framework for Teacher Education 2009, The Right of Children to Free and Compulsory Education Act 2009, *Sarva Shiksha Abhiyan*: Framework for implementation based on the Right of Children to Free and Compulsory Education Act, 2009 guided for the development of curriculum. The present curriculum of Elementary Teacher Education Programme has been organised under five broad areas, namely—(i) Child Studies (ii) Educational and Contemporary Studies, (iii) Curriculum and Pedagogic Studies, (iv) Field Engagement and School Internship (v) Additional Value Added Courses for Holistic Development. Detailed regulations were prepared for implementation of the programme.

PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE), BHOPAL

Student Workbook for Class XII of ‘Housekeeping Supervisor’ Vocational Course

The student workbook is a part of the four year NVEQF curriculum of ‘Housekeeping’ course under the sector of ‘Travel, Tourism and Hospitality’. The student workbook of Class XI consists of seven units, viz., the lodging industry, organisation and layout of housekeeping department, duties and responsibilities of housekeeping staff department, housekeeping inventories, cleaning procedures, hotel guest rooms and cleaning guest rooms. The student workbook of Class XII consists of seven units, viz., housekeeping control desk, role of supervisor staff in housekeeping, linen room procedures, the laundry, flower arrangement, safety, security and first aid and eco-friendly concepts in



hotels. The textbook aims to prepare the students for further studies and for the world of work in the concerned sector.

Student Workbook as per Curriculum of Apparel Made-ups and Home Furnishing Course

The student workbook contains theory and practical aspect of the area. It includes theoretical aspect for building of interpersonal relationships and its stages. Activities related to interpersonal relationship will be useful in employment of vocational pass-outs. The course content also covers fashion illustration which mainly describes fashion figure, eight head mail croqui, mail flesh figures. It also explains draping of casual wear on female and male figure. Specification sheet for garments has been explained under style interpretation. Under garment components sleeves, collars, yokes, cuff, placket and pockets has been described. Fitting and fullness aspects of garment in also given in the work book, very important area of garment construction in dart manipulation which has been detailed out for adult basic blocks.

Curriculum for ‘Meet and Greet Officer’ for Classes IX to XII

The curriculum for Meet and Greet Officer developed earlier for Class IX and X was of 95 hours vocational component and for Class IX and X. However, subsequently, the MHRD upgraded the same job role to Class XI and XII. As such it was required that the curriculum of 95 hours was to be revised to a curriculum of 165 hours vocational component for Class IX and XII. The curricula for six unites viz., introduction to tourism and hospitality industry, meeting and greeting to the customers, prepare for providing meet and greet services, arrange for the guest transfers, handle guest queries and complaints and communication with customers and colleagues. The curriculum of Class XII contains etiquette and hospitable conduct, gender and age sensitive service practices, health and hygiene, safety at workplace, learn a foreign or local language(s) including english and customer-centric services.

Training Manuals for Teachers of ‘General Duty Assistant and Vision Technician’ to be Implemented in Training of Vocational Teachers

The course of vision technician has been designed to train the Para-ophthalmic manpower for providing quality service to the society. During the course, students will have the knowledge of effective communication identification of hazards and their management. They will also have knowledge of modern computers, along with rules and regulation practiced in a vision clinic. Clinical duties include taking and recording vital signs, medical histories, preparing patients for examination, and dispensing ophthalmic prescription. Administrative duties include scheduling appointments and maintaining medical records. The basic requirements to be a Vision Technician are analytical skills, mechanical aptitude, good vision, coordination and self-disciplined. The work ethics, characterised by dedication and persistence and the ability to deal tactfully with patients are some of the essential qualities that one should possess to become a successful Vision Technician.

Video Film Production on Awareness for Employability Skills

Working group committee meetings were organised from 1 to 3 August, 2018 for preparing the script of a video film on awareness for the employability skills



in which the requirement of video film, its objective and utility and also on developed curriculum of employability skills were discussed. Following which the video film on employability skills has been developed.

Guidelines and Scripts for Developing the Video Film and Awareness about Green Jobs

The curriculum of employability skills developed by the institute for vocational subjects from Classes IX to XII includes Green Skills as one of the components to be imparted to students along with communication skills, self-management skills, ICT skills, and entrepreneurship skills. In order to bring about awareness amongst the students on the importance of the sustainable development, green skills and green jobs, two video scripts were developed in a working group meeting of experts. The film will showcase green jobs in agriculture, automotive, construction and energy sectors.

Layout Plan of Laboratory and Project Report Manual

The layout and design of retail laboratory and the components covered in the detailed project report (DPR) for development of laboratory such as introduction, need for development of retail laboratory, benefits of retail laboratory, vision, mission and objectives of retail laboratory, strategies to accomplish mission, layout of retail laboratory, requirements and estimated expenditure to create retail laboratory and tentative time budget for implementation of retail laboratory have been finalised. The developed layout, design and components of retail laboratory were reviewed and finalised in the form of draft DPR of retail laboratory.

Designing of Laboratory Experiments and DPR Retail Lab

The layout and design of Retail Laboratory contains section wise allocation of retail laboratory, standard operating procedures, safety measures required in the retail lab and retail laboratory experiments.

Design and Development of e-Content Material

Orientation on how to develop the structure of the e-Content module and how to conduct a primary analysis of learning tasks and create storyboards, and how to create e-Content for the topics using tools for editing graphics, audios and videos were provided. Following which scripts for employability skills for Class IX has been developed.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

Teachers' Manual to Enhance the Learning of Tamil as a Functional Language at the Secondary Level

The manual has been developed with the objectives to identify and solve the problems faced by teachers in teaching communicative language and preparing tools in support of finding solutions for the problems, and to teach grammar through modern techniques. The manual covers systematically the significance of punctuation and the conditioning factors involved in using the punctuation marks. Phonotactics is covered in the book extensively. Various kinds of sentence structures in Tamil language are discussed. The structure and the format of various types of letters are discussed. Under the section on writing essays, the formats of various types of essays are discussed. The basic



differences between précis writing and the descriptive writing are discussed extensively apart from the differences in the format while writing explanatory essays and essays related to history of a selected topic. The formats of various reports are given in the book. The uniqueness of different kinds of group discussions is given with an objective of how to conduct the group discussions. Strategies to develop the skill of oratory, how one should speak with reference to the identified environment how to conduct and participate in the interview and viva voce examination and the skills of telephonic conversations are also covered.

Updating and Digitisation of the Science Resource Material for Secondary School Teachers—State II

The programme was undertaken with the objectives to update the chapters of the science resource book for secondary school teachers which are relevant to the current secondary school syllabus, to prepare the portions relevant to the exiting secondary school science which are not there in the material developed by Regional College of Education Mysuru in 1974 and to digitize the chapters of the science resource book for secondary school teachers which are relevant to the current secondary school syllabus. The resource material has been updated and digitalised.

e-Resources for the School and Teacher Education Curriculum

The project was initiated to create and utilise a network of e-Resource developers (teachers, teacher educators and students) in developing e-Resources for school and teacher education curriculum, to enable the faculty members and students of RIE, Mysuru to produce audio, video and digital resources using the studio of the institute as well as Free and Open Source Software (FOSS), to update the knowledge and skills of educational functionaries of the states in developing e-Resources for school and teacher education curriculum and to deploy digital resources on NROER and other online platforms.

Fifty videos for school and teacher education based on NCERT textbooks in various subjects for Class VIII and EVS of Class V, an animation film '*Making Decision*' which won best graphics award in the All India children's Audio-Video festival organised by NCERT, CIET and a documentary film '*Hallikar—The Native of Karnataka*', and '*Jasmine—The fragrance of delight*' have been produced. Forty two video lecturers for SWAYAM online course on Internship in Teaching have also been produced and uploaded in youtube channel of the ET cell.

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM, (MEGHALAYA)

Training Module on Textbook Analysis in the context of North-East Region

The objective of the module was to empower and sensitise the Key Functionaries/ KRP's with the methods, processes and technical procedures involved in textbook designs, appropriateness of content, illustrations, systemic issues and concerns for textbook analysis. The module contains materials on current practices of textbook development in the States of Manipur and Meghalaya, technical procedures in writing and production of textbook, criteria and



guidelines for preparation of an ideal textbook, and tools for textbook analysis in social science and language.

Bridge Material for Transition from Tribal Languages (Sadri and Kharia) to Assamese (School Language)

The resource material was developed to bridge the two languages with the Assamese language. In Assam, the children belonging to tea tribes after 1 or 2 years of schooling need to switched on to the State language. It is expected that the bridge material for children will serve as a good source for enhancing their literacy and at the same time, it serve as a resource for smooth transition from the home language to the school language. The resource material include: a list of vocabulary used in Assamese textbooks glossed in *Sadri* and *Kharia* language, sample picture stories, short stories, cultural items and a small description on functional grammar at primary level.





5. Capacity Building Programmes

The Council conducts capacity building programmes, orientation and refresher courses for Master Trainers and Key Resource Persons in different areas of school and teacher education for ensuring quality education at all levels of school and teacher education. During the year, training programmes were conducted in the areas viz., preparation and use of science and mathematics kits, language education, science, social science, vocational education and vocational courses, gender issues in education, ICT in education, ECCE, integrated school literacy programme, guidance and counselling, value education, organisation of internship programmes, conducting educational surveys and assessment practices, quality enhancement in school education, communication skills in English, healthcare (first-aid) management, use of classroom library, textbook development-cum-analysis, teaching in multilingual class, etc.

DEPARTMENT OF CURRICULUM STUDIES

Recognising the imperative need to build the capacities of teachers for improving the learning outcomes, an integrated teacher training model was designed. The department pilot tested the integrated model of teacher training in the state of Tripura from December 2018–March 2019. Training modules on Learning Outcomes, School Based Assessment, Pedagogy of Science, Pedagogy of Mathematics, etc., were prepared by the Council along with the faculty members of DIETs and SCERT of Tripura and which was translated to Bengali by the state. Capacity building programme for 284 KRPs for five days in four parallel sessions was conducted by NCERT in collaboration with SCERT, Tripura. Interactive and activity based sessions on curriculum, syllabus and textbooks, learner centred pedagogy, understanding learner, learning outcomes, school based assessment, pedagogy of languages, etc., were held. A web portal was also designed for tracking the training of KRPs and for providing access to modules and e-resources. State Resource Groups were made for further training of teachers at the block level; following which, the state of Tripura conducted training programmes for 31,000 elementary stage teachers in all the eight districts in a phased manner from February–March 2019. Eight follow-up groups including members from NCERT and the state of Tripura visited each district randomly to different centres of the block level in the district. The training conducted using activity based approach focusing on the competencies and learning outcomes received positive feedback from the stakeholders.

As per the mandate of the department, it has also undertaken training programmes on Contextualisation of Curriculum in Languages, Science and Social Sciences and on Curriculum Research and Development for Key Resource Persons i.e., faculty members of SCERTs and DIETs.

Details of Training, Orientation and Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Integrated Model of Teacher Training	SCERT, Tripura 26 to 30 December, 2018
2.	Capacity Building of Teachers and Teacher Educators of Arunachal Pradesh on Contextualisation of Curriculum in Languages, Science and Social Sciences	SCERT, Itanagar Arunachal Pradesh 23 to 27 October, 2018
3.	Capacity Building Programme for Teacher Educators and Curriculum Developers in the Domain of Curriculum Research and Development for North-Eastern States	NERIE, Shillong 30 January to 2 February, 2019

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS***Online Course in Teaching of Science at the Upper Primary Stage***

The purpose of the online course is the professional development of in-service science teachers at the upper primary stage (Classes VI–VIII). The course consists of multimedia based interactive learning materials. Each module of the course starts from the basics and attempts to develop learner's understanding up to a significant conceptual depth. The course details are available at www.ncert.in. At present, there are 600 teachers enrolled in this course.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

The department has undertaken five sensitisation programmes for teachers and warden on Special Need Students of Kasturba Gandhi Balika Vidyalayas (KGBVs) in SCs, STs, and Minorities concentrated blocks for the year 2018–2019 with the objectives to sensitise the KGBV functionaries on special needs of students of KGBVs situated in SCs, STs, and Muslim Minority concentrated blocks, to enhance the knowledge, skills, and attitude of KGBV functionaries on various strategies in implementing inclusive education for socially disadvantaged girls with disabilities in KGBVs and strengthen the skills of KGBV functionaries for organising further training programmes for KGBV functionaries to improve the quality of education of socially disadvantaged girls with disabilities. Under the project, three days field visits and two days sensitisation programmes were carried out in the States of Maharashtra, Gujarat, Madhya Pradesh, Rajasthan, and Haryana.

The department hosts Minority Cell of NCERT which has undertaken six awareness-cum-training programmes for State Resource Group and Key Resource Persons on Education of Minorities in India. These training programmes were organised by each of the RIEs, NERIE, Umian, and NIE, New Delhi.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Sensitisation Programme for Teachers and Wardens on Special Needs of Students of Kasturba Gandhi Balika Vidyalayas (KGBV) in SC, ST and Minority Concentrated Blocks of Maharashtra	Nashik, Maharashtra 25–26 September, 2018



2.	Sensitisation Programme for Teachers/Warden on Special Needs of Students of Kasturba Gandhi Balika Vidyalayas (KGBVs) in SCs, STs, and Minorities Concentrated Blocks of Rajasthan	Umada, SIERT, Udaipur, Rajasthan 19–20 December, 2018
3.	Sensitisation Programme for Teachers/Warden on Special Needs of Students of Kasturba Gandhi Balika Vidyalayas (KGBVs) in SCs, STs, and Minorities Concentrated Blocks of Gujarat	Gandhinagar, Gujarat 29–30 October, 2018
4.	Sensitisation Programme for Teachers/Warden on Special Needs of Students of Kasturba Gandhi Balika Vidyalayas (KGBVs) in SCs, STs, and Minorities Concentrated Blocks of Madhya Pradesh	Rajya Shiksha Kendra Bhopal 27–28 December, 2018
5.	Sensitisation Programme for Teachers/Warden on Special Needs of Students of Kasturba Gandhi Balika Vidyalayas (KGBVs) in SCs, STs, and Minorities Concentrated Blocks of Haryana	KGBV, Nuh, Haryana 27–28 February, 2019
6.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in North-Eastern India	NERIE, Shillong 18–20 September, 2018
7.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in Eastern India	RIE, Bhubaneswar 3–5 October, 2018
8.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in Central India	RIE, Bhopal 10–12 December, 2018
9.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in Western India	RIE, Ajmer 15–17 January, 2019
10.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in Southern India	RIE, Mysuru 28–30 January, 2019
11.	Awareness-cum-Training Programmes for State Resource Group/Key Resource Persons on Education of Minorities in Northern India	NIE, New Delhi 26–28 February, 2019

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Diploma Course in Guidance and Counselling (Blended Mode)

The diploma course aims to train teachers, teacher educators, educational, and guidance personnel to work as teacher counsellors in schools or related settings. Diploma course in Guidance and Counselling for the 2018 session began in January 2018. The first phase of distance learning comprised monthly tutorials, completion of assignments, and development of portfolios. The second phase, i.e., three months contact programme involved intensive and supervised school practice. It also involved school visits, field visits, and special lectures for skill development. Written examination was also held followed by viva-voce. Internship projects of the trainees were conducted for three months. On successful completion of the course, diploma was awarded to 32 trainees.



Training Programme for Teacher Educators on Value Education

The department organised a training programme for teacher educators on value education at NIE, New Delhi from 25 February to 1 March, 2019 which was attended by teacher educators from DIETs of sixteen different States and UTs. The programme aimed at sensitising teacher educators about the concerns for value education, developing knowledge, attitudes, values, and skills among teacher educators for conflict resolution and enabling teaching-learning activities in and outside the classroom.



Resource person interacting with the participants during the training programme on value education for the teacher educators

Capacity Building of Teachers in Guidance Working in SC and ST Concentrated Areas

Two five-day programmes with the objective of creating awareness among teachers about specific needs of socially disadvantaged learners were organised for teachers from SC and ST concentrated areas. They were sensitised towards the problems of disadvantaged students. Interactive sessions were held on counselling strategies for teachers, guidance needs of students, understanding and handling stress, essential guidance services, teacher as a guidance functionary, vocational opportunities available to students, career information, and various strategies for group guidance to disadvantaged students. Participants shared the guidance skills learnt during the training programme.

S. No.	Title of the Programme	Venue and Dates
1.	Diploma Course in Guidance and Counselling (Blended Mode)	NIE, New Delhi 1 January – 31 December, 2018
		Tutorials were held at NIE, New Delhi 21–22 January, 2019 21–22 February, 2019
2.	Training Programme for Teacher Educators on Value Education	NIE, New Delhi 25 February – 1 March, 2019
3.	Capacity Building of Teachers in Guidance Working in SC, ST Concentrated Areas	SCERT, Telangana, Hyderabad 18–22 June, 2018
		Vishakhapatnam, Andhra Pradesh 11–15 February, 2019

DEPARTMENT OF TEACHER EDUCATION

Professional Development Course for SCERTs/SIEs and DIETs Faculty

Three weeks professional development course for newly recruited SCERTs/SIE and DIET faculty was organised at NIE, New Delhi from 10 to 28 September



2018, to enable them to get a better understanding of the emerging issues in the areas of school and teacher education to make them aware of the structure, role and functions of NCERT, SCERTs, SIEs, and DIETs and to strengthen their capacity to undertake research, material development, training and extension activities in school education and teacher education. A total number of 44 newly recruited teacher



DIET Faculty participating in the Professional Development Course

educators from 44 DIETs of Uttar Pradesh participated in the programme. Major themes covered during the programme include: Issues related to teacher education-structure, roles and functions of NCERT; NCTE; SCERTs/SIEs; DIETs and their Linkages; National Curriculum Frameworks for Teacher Education- Move towards Professionalisation; Vision of Teacher Education in India (JVC) 2012-Issues Related to Teachers and Teacher Education; Teacher Education Curriculum at Elementary Level in the context of NCTE Regulations 2014; Internship Programme with respect to NCTE Regulations 2014; Classroom Management and Teaching Learning Process; Interactive Pedagogy; Performance Indicators for Elementary teachers (PINDICS); Reflective Teacher; RTE Act 2009; Student Evaluation; CCE; Communication Skills; ICT in Teaching Learning Process; Action Research, etc.

Consultative Meet of North-Eastern States on Emerging Issues and Challenges of Teacher Education at the Secondary Stage

In line with the developments in school education, the new National Curriculum Framework for Teacher Education, NCFTE was released by NCTE in 2009. NCFTE (2009) is aimed at upgrading the content and quality of teacher preparation in the light of new content and mechanisms for learning proposed in *NCF 2005*, including child-centred and constructivist approach to learning. However, the textbooks and related learning material for teacher education continue to be based on approaches and mechanisms mentioned in different Curriculum Frameworks for Teacher Education released earlier. Therefore, the teacher preparation in the country in general, and in the North-Eastern Region in particular, does not fully meet the current and emerging requirements of the school education with quality.

In view of the above, a Consultative Meet was organised at NERIE, Umiam, Meghalaya from 4 to 6 December, 2018 with the participation and involvement of experts and teacher educators teaching in different Colleges of Education, IASEs, and Department of Education of 12 Universities in the North-Eastern Region, including Assam, Bodoland, Gauhati, Tezpur, and Dibrugarh Universities of Assam; Nagaland University; Sikkim University; Manipur University; Mizoram University; RG University of Arunachal Pradesh; Tripura University and NEHU Shillong, Meghalaya, to sensitise the teacher educators



to enrich and upgrade the teacher education programmes in the region, in line with the efforts being made at the national level.

The participants from each State and University analysed their respective teacher education programmes on various themes, identified for discussion in the expert group meeting held at NIE, New Delhi on 6 November, 2018 in the light of new developments in school education in general and teacher education in particular taking place at national level and consolidated their views. NCF 2005, NCFTE 2009, and NCTE Regulations 2014 were given due importance in the deliberations. After consolidation, a team leader presented the group views on various themes in front of teacher educators and expert members. The expert members gave their comments and observations on the presentations made by the group leaders. The themes included Admission criteria and process; Curriculum structure and transaction; Internship (School experience, EPC, linkages and networking along with practising schools and local community); Assessment and Evaluation; ICT (present status and future preparedness, MOOC, Swayam, OER, digital learning, etc.); Professional development and capacity building; and Constraints and Suggestions (strength, potential, and challenges).

Capacity Building Programme for Elementary Teacher Educators in Effective Organisation of Internship Programmes

The curriculum for various Teacher Education Programmes has to be revised as per the NCTE Regulations 2014. In the case of Elementary Teacher Education Programme, the major modification required is in the area of School Experience Programme (Internship Programme). Internship is considered as the important component at Pre-service Teacher Education Programme. In order to help the teacher educators working in the various institutions, Department of Teacher Education, NCERT has developed comprehensive guidelines for the organisation of internship programme at elementary teacher education level.

In order to disseminate and orient teacher educators in this area, department has proposed capacity building programmes with the objectives to provide academic inputs to the faculty members to appreciate the Internship Programme as visualised by the NCTE Regulations 2014 and help them in planning and organising effectively the same during the execution of the course.

Two capacity building programmes were organised during 2018–19 at RIE, Ajmer and RIE, Bhubaneswar. Thirty-three DIET/SCERT faculty members from Northern States participated in the programme organised at RIE, Ajmer from 9 to 13 July 2018, and 36 DIET/SCERT faculty members from Eastern Region participated in the programme organised at RIE, Bhubaneswar from 30 July to 3 August, 2018.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Name of the Programme	Duration and Venues
1.	Capacity Building Programme for Elementary Teacher Educators in Effective Organisation of Internship Programmes	RIE, Ajmer 9 to 13 July, 2018
2.	Capacity Building Programme for Elementary Teacher Educators in Effective Organisation of Internship Programmes	RIE, Bhubaneswar 30 July to 3 August, 2018



3.	Professional Development Course for SCERTs/ SIEs and DIETs faculty (Newly Recruited)	NIE, New Delhi 10–28 September, 2018
4.	Consultative Meet of North Eastern States on Emerging Issues and Challenges of Teacher Education at Secondary Stage	NERIE, Umian 4 to 6 December, 2018

DEPARTMENT OF ELEMENTARY EDUCATION

Capacity Building of Key Resource Persons (KRPs) on the use of ‘Resource Package for Awareness in ECCE’

In order to create awareness on Early Childhood Care and Education (ECCE) among various stakeholders, Department of Elementary Education took an initiative and conducted various awareness generation programmes in different States and UTs. Till now, three awareness programmes have been organised in New Delhi and Uttarakhand, where 60 ECCE functionaries and more than 500 community members from 17 States and UTs participated.



Capacity building of Key Resource Persons (KRPs) on package for Awareness in ECCE

In this endeavour, a package titled ‘Resource Package for Awareness in ECCE’ has also been developed in Hindi and English as support material for spreading awareness among stakeholders.

During the programme, ECCE functionaries from 11 States and UTs shared various initiatives taken in the area of ECCE in their place. They have also discussed the curriculum followed at ECCE centres in their own States. Functionaries mentioned that at Anganwadi centres, Anganwadi workers were not able to contribute in the education of young children because a lot of other responsibilities were given to them under ICDS. The functionaries also mentioned that the community and parents were not sending their children to the ECCE centers because of their unawareness of the significance of ECCE in the early years of life.

All functionaries have visited the Department of Educational Kits (DEK) for orientation about the resource package. They were also oriented about the need, significance and various modes of awareness generation for ECCE in the community. Charts, posters, banners, hoardings, stickers, and slogans were developed by the participants to facilitate awareness generation activity at local level. They were also given the opportunity to develop and handle different types of puppets as puppetry is one of the most effective ways to sensitise people. On the last day, a mock up session was organised to generate awareness in the community. Finally, the participants developed a state-wise plan of action to organise similar awareness generating programmes in their respective States and UTs to aware various stakeholders in ECCE.



Capacity Building Programmes on Integrated School Literacy Programme

The capacity building programmes on Language and Literacy for the Master Trainers of States and UTs was organised at Chikhaldara (Maharashtra), Bhopal (Madhya Pradesh) and Gangtok (Sikkim). The objectives of the workshops were to create awareness about the programme and develop a deeper understanding of the pedagogy of reading and writing in the primary grades and learning outcomes of language. Forty master trainers attended the workshop. A set of teachers' and children's resource material in addition to the video programmes on early literacy were distributed among the participants.

Details of Training/Orientation/Capacity Building Programmes Organised

Title of the Programme	Venue and Dates
Capacity Building Programmes for Integrated School Literacy Programme	RIE, Bhopal 17–21 December, 2018 SCERT, Gangtok 28 January to 1 February, 2019 MAA, Pune 11–15 March, 2019

DEPARTMENT OF EDUCATION IN LANGUAGES

A ten-day capacity building programme was organised for the teachers and teacher educators in English at upper primary and secondary stages to address the learners and teachers in schools of various regions under the special financial provision of NCERT, and in urdu for second language Master Trainers teaching urdu at upper primary and secondary stages (L2) of various districts of Maharashtra. Major objectives of the programmes were to develop an understanding among the teachers on the emerging trends in teaching-learning of language, multilingualism as a strategy for language and content learning, storytelling and other pedagogical aspects, to acquaint the teachers with the ideas of *NCF 2005* and its impact, to familiarise the teachers with recent development in the area of language education, teaching-learning strategies, environment, gender, value, inclusive education, learning outcomes, to demonstrate and discuss how language classroom processes/activities based on constructivism can be organised to promote language learning through pair work, group work, assignment, project work, etc., to understand the problems faced by teachers while dealing with the materials in the classroom, to orient them on the strategies to use the textual materials and to provide hands on experience in developing materials using multimedia and ICT for language learning. A training package comprising of various themes on language education was distributed to the participants.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the programme	Venue and Dates
1.	Ten-day Professional Development Programme for English Language Teachers at Upper Primary and Secondary Stage	NIE, New Delhi 3–12 January 2019
2.	Capacity Building of Master Trainers in Urdu Language Teaching at the Upper Primary and Secondary Stages	4–13 March 2019 Mumbai



DEPARTMENT OF GENDER STUDIES

Capacity Building of Secondary Teachers to act as Master Trainers from ST Concentrated Areas of Southern Region on Gender Issues in Education

Gender sensitisation of teachers and teacher educators has been an important mandate of the department. Teachers working in areas with concentration of population belonging to Scheduled Tribe (ST) communities can play a definite role in addressing gender concerns and improving the educational status of ST girls. Hence, the capacity building programme was organised with the objectives to sensitise teachers on gender issues concerning the education of girls belonging to ST communities, equip them to analyse teaching learning material from a gender perspective and build capacity for undertaking action researches on issues related to educational development of ST girls. A five-day training programme was organised at Hyderabad in which the Master Trainers from Andhra Pradesh, Telangana, Karnataka, and Tamil Nadu participated. The participants prepared action plans related to education and empowerment of ST girls to be carried out by them in their respective field areas. After a period of six months, the participants presented the works carried out by them in a follow-up workshop held at NIE, New Delhi from 4 to 8 February, 2019. The trained participants integrated gender concerns in their teaching learning process. They addressed the issue of dropout girls at secondary stage in their schools. They sensitised the students and community members on the disadvantages of early marriage, taboos related to menstrual hygiene and other adolescent issues. Some of them organised talks by police personnel on safety and security of girls and also career and guidance sessions by counsellors.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Training Programme on Capacity Building of Secondary Teachers to act as Master Trainers from ST Concentrated Areas of Southern Region on Gender Issues in Education	Dr. MCR HRD Institute of Telangana, Hyderabad 5–11 August, 2018
2.	Follow-Up Workshop on Capacity Building of Secondary Teachers to act as Master Trainers from ST Concentrated Areas of Southern Region on Gender Issues in Education	NIE, New Delhi 4–8 February, 2019

EDUCATIONAL SURVEY DIVISION

Capacity Building Programmes for KRPs of State Educational Institutions in Conducting Educational Surveys and Assessment Practices

The capacity building programme was organised with the objective to build the capacity of Key Resource Persons (KRPs) of SCERTs, SIEs and State Educational Boards in preparing quality questions and model question papers, build the capacity of SCERTs and SIEs in planning and implementing the school based Continuous and Comprehensive Evaluation, appraise state functionaries with the latest developments in examinations at school stage, build the capacity of state key resource persons in survey techniques, sampling procedures, data management, data analysis and reporting of survey studies, and build the capacity of state level as well as district level functionaries in conducting large



scale achievement survey activities at state and district level. The services of Key Resource Persons (KRPs) trained during capacity building programmes are utilised by SCERTs, SIEs and the State Educational Boards to further train the teachers in question paper setting, educational evaluation, etc., so as to bring improvement in their functioning and making students' assessment more creditable.

Details of Training/Orientation/Capacity Building Programme Organised

Title of the Programme	Venue and Dates
Capacity Building Programmes for Key Resource Persons (KRPs) of Meghalaya Board of School Education in Question Paper Setting and Evaluation	Meghalaya Board of School Education, Shillong 10–14 September, 2018

DIVISION OF EDUCATIONAL KITS

On the basis of Manual of Science and Mathematics Kits, two orientation programmes titled orientation of TGTs (from SC dominated areas) on the Preparation and use of Science Kit, and Orientation of TGTs (from SC dominated areas) on Preparation and Use of Mathematics Kit were conducted for the State of Madhya Pradesh and NIE, New Delhi from 21–24 May, 2018 and 31 July to 3 August, 2018 respectively.

Details of Training/Orientation/Capacity Building Programme Organised

S.No.	Title of the Programme	Venue and Date
1.	Orientation of TGTs (from SC dominated areas) on the preparation and use of Science Kit	NIE, New Delhi 21–24 May, 2018
2.	Orientation of TGTs (from SC dominated areas) on the preparation and use of Mathematics Kit	NIE, New Delhi 31 July – 03 August, 2018

LIBRARY AND DOCUMENTATION DIVISION

Capacity Building Programme for the DIET/SCERT Librarians/Library-Incharge of North Eastern Region, NERIE, Umiam, Meghalaya

The training programme was conducted by LDD at NERIE, Umiam, Meghalaya from 11 to 15 March, 2019. Participants from Manipur, Mizoram, Meghalaya, Assam, and Arunachal Pradesh attended the programme. The objective of the programme was to develop and update LIS professionals' skill and the knowledge with regard to library management among the librarian. The programme was tailored in such a way that the participants came to know about the topic of relevance in the digital era. During five days, the following thrust areas were covered: Academic libraries as learning resource centres; Digital initiatives of GOI in education with special reference to open educational resources for school educators; Collection development in academic library with SWOT analysis; Plagiarism and role of copyright, IPR, DRM; Types of information sources and their processing in both print and electronic environment; Resource sharing consortia and role of social media for knowledge management; Library standards with special reference to library statistics; Traditional library services and role of Free/Open Source Software for library management; Issues and challenges, Information on literacy for promoting reading habit in academic



libraries; Role of school libraries; and Web search techniques and digital archiving of open access information resources.

Details of Training/Orientation/Capacity Building Programmes Organised

Title of the Programme	Venue of Date
Capacity Building Programme for the DIET/SCERT Librarians/Library-Incharge of North Eastern Region, NERIE, Umiam, Meghalaya	NERIE, Umiam, Meghalaya 11–15 March, 2019

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

In-service Course for PRT Music Teachers of KVS

The KVS conducted a 21-day in-service Course for PRT (Music) 2018–19 at NIE Campus from 8 to 28 October, 2019. Forty five teachers of KV attended the programme. The objective of the programme was to initiate teacher's thinking towards allied areas of music, like poetry, dance, historical monuments, drama, etc. Sessions were conducted on art integrated learning, creation of music in poetry or background music for occasions at schools, role of languages in music—traditional music and their importance, role of folk music and percussion instruments, theatre in education, etc. The teachers visited Mughal Garden, Sangeet Natak Academy, Lalit Kala Academy for gaining exposure to cultural organisations and important places in the city.



Performance of KVS teachers during the in-service course

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	In-service Course for PRT Music Teachers of KVS	NIE, New Delhi 8–28 February, 2019

INTERNATIONAL RELATIONS DIVISION

Customised Training of 20 Educational Professionals of Afghanistan on School Education

The two-week training programme for the 20 Educational Professionals of Afghanistan on School Education was organised by the International Relations Division (IRD) in cooperation with the Division of Technical Cooperation, Ministry of Education, GoI in NCERT, New Delhi from 18 February to 3 March, 2019. The programme included diverse facets of school education covering themes, such as significant guidelines of the



National Curriculum Framework 2005, current international perspective on school education, early childhood education, elementary education, activity-based teaching-learning in science, social science and languages, innovative student assessment practices, curriculum, syllabi and textbooks, child rights, environmental awareness, gender sensitivity, education for children with special needs, vocational education, adolescence and gender education, integration of arts and aesthetics in educational process for wholesome learning, use of ICT in educational process and media and peace education. Besides, the programme also included visits to important historical places in Delhi and Ajmer and two Central Schools in Delhi for the exposure of participants to actual teaching-learning processes happening in Indian schools. Different academic sessions during the course of the programme were conducted by acclaimed faculty from NCERT and other institutions like the Commonwealth of Learning and Gandhi Smriti and Darshan Samiti, New Delhi.

Sub-regional Meeting-cum-workshop on 'Integrating SDG 4.7 and Global Citizenship Education into Teacher Training in South Asia'

One-day training programme for 40 teachers, teacher educators, principals and school administrators from various government and private sector schools of the National Capital Region of Delhi was organised by the IRD on 29 June 2018 as part of the Sub-regional Meeting-cum-workshop on 'Integrating SDG 4.7 and Global Citizenship Education into Teacher Training in South Asia' in NCERT. This training was conducted in partnership with the APCEIU to spread awareness about the relevance of Integrating GCED into school curricula and classroom processes in India.



Teachers participating in the workshop on Integrating SDG 4.7 and GCED

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Customised Training of 20 Educational Professionals of Afghanistan on School Education	NIE, New Delhi and RIE, Ajmer 18 February – 3 March, 2019

Online Teacher Training Modules for Capacity Building and Quality Enhancement in School Education in India

A one-day workshop was organised on the development of Online Teacher Training Modules for Capacity Building and Quality Enhancement in School Education in India on 4 December, 2018 in NCERT, New Delhi under the provisions of the MoU signed between the NCERT and Curtin University, Australia. Twenty-five faculty members of NCERT including the Director and Heads of Departments attended the workshop. On behalf of Curtin University, Anna Parkin, *Professor and Dean International* and Rekha Koul, *Senior Faculty*,



School of Education participated in the workshop. Dr. Koul also made a detailed presentation on the contribution that the Curtin University will make to help NCERT in developing online teacher training modules.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Continuous Professional Development of NCERT Faculty Members on ICT in Education

Online sessions were organised in the area of ICT in Education for the faculty from all the constituent units of NCERT. Eight sessions were conducted in the area of— Collaborative Tools in Education, Working with YouTube, Cyber Safety and Security, Open Educational Resources and Free and Open-Source Software by experts from the respective areas. Besides, it also organised a workshop with faculty members from NCERT and Mauritius.



Capacity building programme on ICT in Education organised for the Mauritius Institute of Education, Mauritius held at CIET, NCERT

Online Certificate Course on Action Research in Education

Hindi version of all the four modules that are available online have been developed and updated. This year, out of the 400 applications received, 165 participants have joined the course. The course was launched on 30 November, 2018. Evaluation for the assessments was done in the last week of March and the passed out participants were issued certificates.

Orientation of Various Stakeholders on Cyber Safety and Security

The SRGs of 36 States and UTs and ICT coordinators of States and UTs were provided training on cyber safety and security. Safer Internet Day by faculty and staff members of CIET was celebrated on 5 February, 2019. Cyber Mela— a series of competitions are also being conducted in collaboration with CRPF. 346 State Resource Groups (SRGs) of 36 States and UTs were trained on cyber safety and security. Live sessions were conducted through SWAYAM PRABHA— DTH channel for creating awareness related to cyber safety and security to the stakeholders from school. A series of online sessions on Cyber safety and security was organised for capacity building of NCERT faculty. Safer Internet day was celebrated on 5 February, 2019 by the faculty and staff members of CIET. Faculty also took part in the rally and panel discussion conducted in collaboration with cyber peace foundation as part of safer internet day celebration.

Training of SRGs

Regular training of more teachers in all the States and UTs is required to fulfil the dream of Digital India. Therefore, CIET-NCERT organised a series of programmes to orient the States and UTs core team/State Resource Group (SRG) members (as Master Trainers/Key Resource Persons) on ICTs in Education



and learning to facilitate the development of e-content, OER, Mobile apps, MOOCs on SWAYAM, also carry out digitalisation of resources and share those on DIKSHA, NROER, SROER, e-Pathshala, ShaGun, etc. These orientations will help us to implement ICTs in Education initiatives and achieve the 3S, i.e. Skill, Scale, and Speed envisioned by the Hon'ble Prime Minister of India. It covered all the 36 States and UTs in different phases orienting 346 participants.



Hand-on session on tools for creating e-content during training of State Resource Group (SRGs), New Delhi

Details of Training/Orientation/Capacity Building Programmes Organised

Phase	States and UTs to be covered	Dates
I	Andhra Pradesh, Puducherry, Tamil Nadu, Telangana, Uttarakhand	9 to 13 July, 2018
II	Dadra and Nagar Haveli, Daman & Diu, Gujarat, Maharashtra, Goa	23 to 27 July, 2018
III	Tripura, Meghalaya, Mizoram, Arunachal Pradesh, Nagaland	30 July to 3 August, 2018
IV	Kerala, Karnataka, Manipur, Assam, Sikkim	6 to 10 August, 2018
V	West Bengal, Odisha, Bihar, Jharkhand	20 to 25 August, 2018
VI	Chandigarh, Lakshadweep, Madhya Pradesh, Uttar Pradesh	27 to 31 August, 2018
VII	Andaman and Nicobar Islands, Punjab, Jammu and Kashmir	10 to 14 September, 2018
VIII	NCT of Delhi, Chhattisgarh, Rajasthan, Haryana, Himachal Pradesh	24 to 28 September, 2018
	Chandigarh	18 to 23 March, 2019

PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE), BHOPAL

The institute organised 43 training programmes for teachers and key functionaries of States and UTs. Fourteen orientation programmes were organised for the key functionaries of Uttar Pradesh, Haryana, Tamil Nadu, Jammu and Kashmir, West Bengal, Rajasthan, Bihar, Maharashtra, Jharkhand, Assam, Gujarat, Goa, Telangana, Madhya Pradesh, States of Southern Region and North-Eastern Region for the implementation of vocational courses in the schools. Total 443 key functionaries of different States and UTs participated in these programmes. The participants were acquainted with the various aspects of the implementation of the scheme of vocationalisation of secondary and higher secondary education under the *Samagra Shiksha Abhiyan* (Integrated Scheme



for School Education) and the role of different departments and agencies in the implementation of the scheme, including National Skill Development Corporation (NSDC), National Skill Development Agency, State Directorate of School Education, State Education Boards and Vocational Training Providers, etc. The roles and functions of the key functionaries including the Principals of senior secondary schools in the effective implementation of the VEP were also discussed during different sessions of the programme. The participants were informed about the curriculum and textbook of Employability Skills which form the core component of all the vocational subjects from Classes IX to XII. The curriculum of Employability Skills includes communication skills, self-management skills, ICT skills, entrepreneurship skills and green skills. Sessions were also conducted on domains of learning, vocational pedagogy and skill assessment, and evaluation of students.

The institute organised 10 teachers training programmes on vocational pedagogy for teachers of Haryana, Telangana, Goa, Madhya Pradesh, Jammu and Kashmir, Tamil Nadu, Rajasthan, North-Eastern States, Odisha, and West Bengal. The teachers were acquainted with National Skill Qualification Framework (NSQF), competency based education and training, vocational pedagogy including constructivist approach, domain of learning, general and specific objectives, role of vocational teachers, learning theories, teaching and learning process, communication skill, teaching learning aids, evaluation and assessments, session plan preparation and micro teaching. Assignment and group work was also given to the participants on different topics after delivering the lectures. Every participant demonstrated micro-teaching and feedback were also given for further improvement. Pre and post-tests were also taken to assess the improvement in teaching skills.

Training programmes on different vocational courses running under NSQF in different States and UTs was organised for the vocational teachers. The subject training was conducted for Store Operations Assistant, Cashier, IT and ITeS, House Keeping, Vision Technician, Animal Health Worker, Dairy Farmer, Sewing Machine Operator, Paddy Farmer, Floriculturist (Open Cultivation), Business Correspondent, Automobile Technician, and Engineering and Technology based vocational courses in developing teaching-learning and assessment skills and other vocational courses. The teachers learned various pedagogic topics such as overview of NSQF, role of vocational teachers, formulate general and specific objectives, teaching learning methods and media, employability skills, implementation of lesson plan and micro-teaching in schools. The participant teachers and trainers also learned various subject specific topics in the respective training programmes. Field visits were also organised for the participants for getting a practical exposure of the vocational courses taught by them.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Training of Teachers on Business Correspondent and Vocational Pedagogy	PSSCIVE, Bhopal 7–11 May, 2018
2.	Orientation Programme of Nodal Officers of State for Effective Implementation of Scheme of Vocationalisation of Secondary and Higher Secondary Education	PSSCIVE, Bhopal 30 May to 01 June, 2018



3.	National Teachers Training Programme in IT/ITeS for Vocational Teachers of NSQF.	PSSCIVE, Bhopal 25–29 June 2018
4.	National Training Programme in Automobile Technology related for Vocational Teachers of Rajasthan and Punjab States	PSSCIVE, Bhopal 6–10 August, 2018
5.	Training of vocational Teachers of Textile Designing Vocational Courses	PSSCIVE, Bhopal 4–8 September, 2018
6.	Capacity Building of Key Resource Persons in Implementation of Scheme of Vocationalisation of Education under NSQF	PSSCIVE, Bhopal 5–7 September, 2018
7.	Orientation Programme on Effective Implementation of Vocational Courses in Schools	DVET, Kolkata 31 August to 02 September, 2018
8.	Training on Vocational Pedagogy for Teachers of Haryana State	PSSCIVE, Bhopal 27–31 August, 2018
9.	Training on Vocational Pedagogy for Vocational Teachers of Goa, Telangana and Madhya Pradesh	Directorate of Education Porvorim, Goa 3–7 September, 2018
10.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Haryana State	PSSCIVE, Bhopal 10–12 September, 2018
11.	Orientation Programme of Key Functionaries of Maharashtra, Bihar, Jharkhand, Assam, Gujarat and Tripura on NSQF and its Implementation	PSSCIVE, Bhopal 18–20 September, 2018
12.	Training of Vocational Teachers of Engineering and Technology area in Developing Teaching Skills and Assessment Method for Puducherry, Odisha and Daman & Diu	PSSCIVE, Bhopal 24–28 September, 2018
13.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Telangana	PSSCIVE, Bhopal 24–28 September, 2018
14.	Training of Vocational Teachers for the Job Roles of Store Operations Assistant and Cashier for the Southern-Region	University College of Commerce and Business Management, Osmania University, Hyderabad
15.	Training of Engineering and Technology Based Vocational Teachers in Developing Teaching-Learning and Assessment Skills	Guru Nanak Dev University, Amritsar 8–12 October, 2018
16.	Training Programme for Vocational Teachers of IT/ITeS and Electronics	SCERT, Trivandrum 3–7 October, 2018
17.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Tamil Nadu	Asha Niwas Social Service centre, Chennai 9–11 October, 2018
18.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Uttar Pradesh and Uttarakhand States	PSSCIVE, Bhopal 3–5 October, 2018



19.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Goa	Directorate of Education Porvorim, Goa 22–24 October, 2018
20.	Training for Vocational Teachers in the Area of Apparel Made-ups and Home Furnishing Sector Job Roles—Self Employed Tailor and Sewing Machine Operator	PSSCIVE, Bhopal 29 October to 02 November, 2018
21.	Orientation Programme on Effective Implementation of Vocational Courses in Schools of Southern-Region	Koneru Lakshmaiah Education Foundation Uddeswaram, Guntur 29 to 31 October, 2018
22.	Training of Vocational Teachers for the Job Role of Store Operations Assistant and Cashier for the North-Eastern Region	JN School of Management Studies, Silchar, Assam 15 to 28 November, 2018
23.	Orientation Programme on Effective Implementation of Vocational Courses of UT of Andaman & Nicobar Islands	Directorate of Education, Port Blair 10 to 14 November, 2018
24.	Training of Vocational Pedagogy for Teachers of Jammu & Kashmir and Tamil Nadu	PSSCIVE, Bhopal 12 to 16 November, 2018
25.	Training of Engineering and Technology Based Vocational Teachers in Developing Teaching-Learning and Assessment Skills for Southern States	RMSA, Bangalore 11 to 15 December, 2018
26.	Training of Vocational Teachers for the Job Role of Store Operations Assistant and Cashier for the Western-Region	Directorate of Education Porvorim, Goa 01 to 14 December, 2018
27.	Training of Vocational Teachers for the Job Role of Paddy Farmer	PSSCIVE, Bhopal 10 to 14 December, 2018
28.	Training of Vocational Teachers in the Area of Apparel Made-ups and Home Furnishing Sector Job Role—Sewing Machine Operator	PSSCIVE, Bhopal 10 to 14 December, 2018
29.	Training of Vocational Teachers for the Job Role of Animal Health Worker and Dairy Farmer	Guru Angad Dev Veterinary Science University, Ludhiana 26 to 30 December, 2018
30.	Training of Vocational Teachers for the Job Role of Store Operations Assistant and Cashier for the Eastern-Region	PSSCIVE, Bhopal 28 December 2018 to 10 January, 2019
31.	Training of Vocational Teachers for the Job Role of Vision Technician	PSSCIVE, Bhopal 7 to 11 January, 2019
32.	Training programme on Entrepreneurship Development for the Teachers Belonging to SC and ST Category	PSSCIVE, Bhopal 14 to 18 January, 2019
33.	Orientation Programme on Effective Implementation of Vocational Courses in Schools	PSSCIVE, Bhopal 21 to 23 January, 2019
34.	Teacher Training Programme on Vocational Pedagogy for Teachers from Haryana	SCERT, Gurugram 14–18 January, 2019



35.	Training of Vocational Teachers for the Job Role of Store Operations Assistant and Cashier for the Northern-Region	Government PG College, Sector I, Panchkula, Haryana 22 January to 04 February, 2019
36.	Training on Vocational Pedagogy for Teachers from Tripura, Arunachal Pradesh and Other North-Eastern States	NERIE, Umiam 05 to 09 February, 2019
37.	Training on Vocational Pedagogy for Vocational Teachers from Nagaland State and Other North-Eastern States	NERIE, Umiam 19–23 February, 2019
38.	Orientation Programme on Effective Implementation of Vocational Courses in Schools in Arunachal Pradesh	NERIE, Umiam 18–22 March, 2019
39.	Training Programme for Vocational Teachers of House-Keeping Course	PSSCIVE, Bhopal 25–27 February, 2019
40.	Training on Vocational Pedagogy for Teachers of Uttar Pradesh	PSSCIVE, Bhopal 05–09 March, 2019
41.	Training on Vocational Pedagogy for Vocational Teachers of West Bengal	PSSCIVE, Bhopal 11–15 March, 2019
42.	Training on Vocational Pedagogy for Teachers of Odisha	SCERT, Bhubaneswar 25–29 March, 2019
43.	Training Programme for Vocational Teachers of IT/ITeS for North-Eastern States	Don Bosco Institute, Guwahati March, 2019

REGIONAL INSTITUTE OF EDUCATION, AJMER

During the year, thirteen capacity building programmes for KRPs were organised on different subject areas viz., training programmes for DIET and SCERT faculty on research methodology and data analysis; capacity building programme for KRPs in science at secondary level through laboratory approach; pedagogical practices for learning outcomes in EVS, Science and Mathematics at elementary stage; use of e-Content in Science at secondary level on learning outcomes in Hindi, Urdu, English at primary level; pedagogical practices for inclusive education in English language teaching at elementary stage; modernising the library services in educational evaluation on Art Integrated Learning and on ICT integrated learning of science and mathematics; and use of micro-scale chemistry kit at the senior secondary level. In all, 411 participants from various States and UTs from Northern Region attended the training programmes.

In addition, Diploma Course in Guidance and Counselling (Distance, Online and face-to-face) was also conducted in which 47 candidates completed the course.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and dates
1.	Training Programme for DIET and SCERT Faculties on Research Methodology and Data Analysis for the States of Uttarakhand, Chandigarh, Haryana, Delhi and Punjab	RIE, Ajmer 26–30 November, 2018



2.	Capacity Building programme for KRPs in Science at Secondary Level through Laboratory Approach	RIE, Ajmer 21–25 January, 2019
3.	Capacity Building of KRPs on Pedagogical Practices for Learning Outcomes in EVS/ Science and Mathematics at Elementary Stage	RIE, Ajmer 16–17 August, 2018
4.	Capacity Building of KRPs in Development and Use of e-Content in Science at Secondary Level	RIE, Ajmer 28 January – 1 February, 2019
5.	हिमाचल प्रदेश एवं उत्तराखंड राज्य के प्राथमिक स्तर के हिंदी, उर्दू, अंग्रेजी के मुख्य संदर्भ व्यक्तियों का भाषा संप्राप्ति शिक्षण (लर्निंग आउटकम) प्रशिक्षण	RIE, Ajmer 22–26 October, 2018
6.	Capacity Building Programme for KRPs on Inclusive Pedagogy for CWSNs for the States of Rajasthan, Himachal Pradesh and Jammu and Kashmir	RIE, Ajmer 8–13 October, 2018
7.	Capacity Building of KRPs in English Language Teaching	RIE, Ajmer 7–11 January, 2019
8.	Capacity Building of KRPs on Modernising the Library Services	RIE, Ajmer 18–27 February, 2019
9.	Capacity Building Programme for Key Resource Persons of Jammu and Kashmir State Board of School Education in Educational Evaluation	RIE, Ajmer 8–12 October, 2018
10.	Training of KRP's on Art Integrated Learning	RIE, Ajmer 12–16 November, 2018
11.	Capacity Building of KRPs for the States of Northern Region on ICT Integrated Learning of Science and Mathematics	RIE, Ajmer 4–8 February, 2019
12.	Capacity Building of KRPs on the use of Micro-scale Chemistry kit at Senior Secondary Level	RIE, Ajmer 7–11 January, 2019
13.	Diploma Course in Guidance and Counselling (Distance/Online and face-to-face)	RIE, Ajmer 31 January to 2 February 2019

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

During the year 2018–2019, RIE, Bhopal conducted training programmes in different areas of school education and teacher education like pedagogy of science, mathematics and social science, curriculum design, classroom management, research methodology, etc.

Details of the Training/Orientation/Capacity Building Programmes

S. No.	Title of the Programme	Venue and Dates
1.	Training of KRPs on Political Science Pedagogy at Higher Secondary Level	SCERT, Raipur, C.G. 8–12 October, 2018
2.	Training of KRPs on Constructivist Pedagogy	SCERT, Goa 14–18 January, 2019



3.	Training of KRPs on Evaluation and Assessment Techniques for Upper Primary School Level in Science Subjects	RIE, Bhopal 7–11 January, 2019
4.	Training on Use of Science Kit for Secondary School Science Teachers	RIE, Bhopal 24–28 September, 2018
5.	Training Programme on Internship for Teacher Educators	RIE, Bhopal 25 February to 1 March, 2019
6.	Certificate Course on Pedagogy of Mathematics at Elementary Stage	RIE, Bhopal 22–30 December, 2018
7.	Capacity Building of KRPs on Technology-Pedagogy and Content Integration in Science at Upper Primary Level for the State of Gujarat	Somnath, Gujarat 11–15 February, 2019
8.	Orientation of KRPs on Pedagogical Processes and Learning Outcomes in Science at Upper Primary Level in the States of Western Region	RIE, Bhopal 25–27 March, 2019
9.	Training of KRP's on Social Science Pedagogy for Chhattisgarh	Silvaasa, Daman & DNH 22–26 October, 2018
10.	Capacity Building of KRPs of Goa on Curriculum Design	SCERT, Goa 11–15 February, 2019
11.	Training programme on Communication Skills for KRPs of Maharashtra at Secondary Level	RIE, Bhopal 14–18 January, 2019
12.	Training Programme for Key Resource Persons on Classroom Management for the State of Maharashtra	RIE, Bhopal 28 January – 1 February, 2019
13.	Training Programme on Research Methodology for Teacher Educators	RIE, Bhopal 21–24 January, 2019
14.	Training on Constructivist Pedagogy in Urdu for KRP of Madhya Pradesh and Maharashtra	RIE, Bhopal 21–25 January, 2019
15.	Training on the Use of Library and Technology Developments there in for Primary Teachers of Goa	SCERT, Goa 28 January – 1 February, 2019

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Diploma Course in Guidance and Counselling (DCGC) 2018 (Blended Mode)

This is a one year Post-Graduate diploma beginning in January of every year, in a blended mode of first six months online, followed by three months of face-to-face mode, ending with three months of internship in any institute of the choice of the candidate. The objective is to empower teachers and teacher educators with additional competency to deal with the issues raising in their practical situation on day-to-day basis. For the session 2018, RIE, Bhubaneswar enrolled 24 candidates based on selection test and interview. The programme started with orientation and continued with tutorials along with online support for completion of assigned tasks. During the face-to-face



mode beginning in July, the students are prepared for conducting practical works as per the course guidelines in an experiential modality including demonstrations, role plays, group work, discussions and presentations, workshops, and seminars. Field visits to service providing institutes and career exhibition were organised. At the end of the face-to-face mode, both written and practical examinations were conducted. Apart from this examination, the students were assessed throughout the face-to-face phase by the respective mentors of different modules for their practical conducted in the schools. Internships were carried out under the supervision of mentors in the respective institutes. In addition, the RIE, Bhubaneswar faculty supervised the activities by personally visiting each internship centre. The grades compiled from the year round assessment by the various resource persons, mentors, supervisors, and tutors were converted into final grade point and results were declared in the month of March 2019. Twenty-two students fulfilling the requirements of the course guidelines successfully completed the programme.

Capacity Building Programme on Learning Outcomes

A capacity building programme on Learning Outcomes for Elementary Teachers on Madrasa (Odisha) was conducted from 20 to 24 January, 2019 as a part of the Minority Cell activity. All together 44 Madrasa elementary teachers from 11 Districts of Odisha attended the programme. There were 16 technical sessions on—concept of learning outcomes, learning outcomes of different subjects, minority education, pedagogical processes to achieve outcomes, and so on.

Capacity Building Programme for KRPs on Integrating ICT in Education

A capacity building programme for Key Resource Persons (KRPs) on Integrating ICT in Education at secondary level in Jharkhand was conducted with the objectives to develop skills among teachers in integrating computer applications for teaching learning, to develop the basic skills to use mobile applications for teaching learning and to familiarize debate about latest initiatives of MHRD, NCERT and CIET for e-Learning, like e-Pathshala, MOOC, e-Gyan Kosh, e-Gyanvani, Swayam Prabha Channel, etc. Total 26 KRPs attended the training programme held at RIE, Bhubaneswar from 4 to 10 January, 2019. A capacity building programme for Key Resource Persons (KRPs) in Science Education at Secondary level for the Resource-Centre of Jharkhand was conducted to help the KRPs learn how to develop a science resource centre at secondary level with the help of a training package. The State Resource Group of Jharkhand was prepared for content related pedagogical practices in science by using science resource centre.



An interaction session during the orientation-cum-workshop for State Resource Group on ICT in Education and Learning Phase IV



Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Capacity Building Programme on Learning Outcomes for Elementary Teachers of Madrasas (Odisha)	RIE, Bhubaneswar 20–24 January, 2019
2.	Orientation Programme for KRPs from Odisha for Developing Quality Questions for Secondary Level	RIE, Bhubaneswar 3–7 December, 2018
3.	Capacity Building of Key Resource Persons on Research Methodology	RIE, Bhubaneswar 8–12 October, 2018
4.	Capacity Building of KRPs in Science Education at Secondary Level for the Resource - Centre of Jharkhand	RIE, Bhubaneswar 19–23 November, 2018
5.	Diploma Course in Guidance and Counselling (Distance/Online and Face-to-Face)	RIE, Bhubaneswar
6.	Capacity Building Programme for Graduate Trained Teachers of Mathematics of A&N Islands	Port Blair A&N Islands 14–19 November, 2018
7.	Capacity Building of KRPs in Integrating ICT in Education at Secondary Level in Jharkhand	RIE, Bhubaneswar 4–10 January, 2019
8.	Capacity Building for the KRPs of Higher Secondary Level in Mathematics of Jharkhand State	RIE, Bhubaneswar 25 October to 1 November, 2018
9.	Capacity Building of Teachers at Secondary Level on Guidance and Counselling for Bihar and Odisha	RIE, Bhubaneswar 25–31 January, 2019
10.	Implementation of NCERT CCE Package in D.M. School	RIE, Bhubaneswar 18–28 May, 2018
11.	Capacity Building Programme in Bengali Language for KRPs of Jharkhand and Bihar	RIE, Bhubaneswar 24–28 September, 2018
12.	Capacity Building Programme for the KRPs on Social Sciences at Secondary Level of Jharkhand	RIE, Bhubaneswar 28 January to 1 February, 2019

REGIONAL INSTITUTE OF EDUCATION, MYSURU

Sixteen trainees have completed the Guidance and Counselling Course-2018 batch successfully. Results were announced in February 2019. Certificates and marks cards were sent to the trainees. 50 trainees are enrolled in the DCGC, 2019 batch started from 1 January 2019. Induction-cum-first tutorial was organised during February 2019 for the newly admitted trainees.

A training programme on the use of art as a medium of transaction in schools for secondary teacher educators working at CTEs, IASEs, and high schools belonging to Karnataka, Telangana, and Kerala was conducted in which the thematic areas from dance, music, drama, drawing, and painting were covered.



A training programme for higher secondary school teachers of Telangana in content and methodology of teaching physics was conducted with the objectives to identify the hard spots in teaching physics at higher secondary level and to develop the module on the identified hard spots through constructive approach and relevant methodologies. A training package in content and methodology of teaching physics has also been developed.

A capacity building programme for KRP's of *Ganita Vijayam* to improve mathematics learning in primary classes of Kerala was conducted with the objectives to understand the implementation of the programme *Ganita Vijayam* by SSA Kerala, to identify the areas for which support is required for the programme, to train Key Resource Persons of the programme *Ganita Vijayam* on the identified topics, and to train KRP's in various pedagogical aspects including ICT to improve mathematics learning.

In order to enhance the capacity of teachers in teaching English in primary classrooms with ICT mediation, a training programme was conducted. Practical orientation was given to the teachers in ICT lab and Language lab in developing and using teaching-learning materials in English. Hands-on-training was given to the teachers in utilising web resources and mobile apps to teach English in the classrooms. Teachers were provided practical training in AV studio to develop short films to teach language skills. Teachers were given printed materials along with CDs containing the modules. Teachers were trained to create ICT based teaching-learning materials.

KRPs of Telangana state were given hands-on training in developing communication skills in English among students. Different aspects of communication skills with practical orientation, non-verbal communication and etiquette, and ICT based lessons were provided to the teachers.

A content enrichment programme for science teachers at secondary level was organised at RIE, Mysuru. Modules were developed on selected topics in science at secondary level where science teachers found difficulty in transacting the science concepts. The teachers were trained in developing video lessons, designing simple laboratory experiments to teach abstract science concepts, use Science Kits developed by NCERT, personalised learning practices, use of modern technology; Artificial Intelligence (AI), Machine Learning (ML) and multiple facts of teaching-learning process with a specific focus on constructivist approach to teaching of science.

A training programme on emergency healthcare (First Aid) management was conducted for secondary school teachers of Andhra Pradesh with the objectives to orient teachers on the basics of first aid, to train teachers to use the first aid kit effectively in emergency situations, to develop skills of handling emergency situations, to enable the teachers to handle the situation skillfully, and remain calm till medical help arrives.

A training programme on process-based teaching and evaluation in science for Classes VI to VIII was organised to orient teachers on the process-based teaching and evaluation, to enable participants to identify learning processes in science text of Class VI to VIII, and to enable participants to create evaluation tools for learning process. The KRP's were trained on the aims of teaching of science, appraisal of learning outcomes and assessment practices, analysis of content, types of process skills in science, assessment of process skills in science, need for pedagogical shift in science, and process-based strategies.



A training programme for the elementary teachers of Kerala and Lakshadweep was organised on planning, organisation and effective use of classroom library to enable the teachers to understand the need and importance of classroom library; to develop essential professional skills and competencies among the teachers in planning, organising and managing the classroom library; to train and empower the teachers in identification, selection and collection and development for the classroom library; to acquaint the teachers with various skills and techniques for the effective use of classroom library; to train the teachers to create reading interest and develop reading habit among the students; and in conducting various activities among the students for the effective use of classroom library.

A five-day training programme on planning, organisation, and effective use of classroom library was organised at RIE, Mysuru from 26 to 30 November 2018 for 30 elementary teachers of Kerala and Lakshadweep. Training materials for the programme have also been developed for it. All the participants, after returning to their respective schools, immediately initiated necessary action to start a classroom library.

Content-cum-pedagogy enrichment programme for KRP's on mathematics at secondary level was organised at RIE, Mysuru from 24 to 28 September 2018 to identify the content areas where mathematics teachers find difficulty in transacting, to identify the appropriate teaching strategies in teaching mathematics at secondary level, and to train the secondary school teachers to ease their difficulties in the identified content areas through relevant methodologies.

A training programme for higher secondary teachers in content and methodology of teaching biology was organised for Telangana State at RIE, Mysuru from 8 to 12 October 2018 with the given objectives—to upgrade the content knowledge of higher secondary school teachers, to develop new experiments and activities for the teaching-learning of biology, to upgrade the working knowledge through field work and field visits to research institutes in the locality, and to upgrade the teaching methodology in biology through power point presentations, video clippings, documentaries, group work, discussions, and other ICT back-up.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Training Higher Secondary Teachers in Content and Methodology of Teaching Physics	RIE, Mysuru 1–5 October, 2018
2.	Capacity Building Programme for KRPs of Ganitavijayam Mathematics Learning in Primary Classes	RIE, Mysuru 18–21 September, 2018
3.	Enhancing the Capacity of Teachers in Teaching English in Primary Classrooms with ICT Mediation	RIE, Mysuru 22–26 October, 2018
4.	Training on Communication Skills in English for Higher Secondary Teachers of Telangana State	RIE, Mysuru 16–20 July, 2018
5.	Content Enrichment Programme for Science Teachers at Secondary Level	RIE, Mysuru 26–30 November, 2018



6.	Training Programme on Emergency Healthcare (First Aid) Management for Secondary School Teachers of Andhra Pradesh	RIE, Mysuru 9–13 July, 2018
7.	Training Programme on Process Based Teaching and Evaluation in Science for Classes VI to VIII	RIE, Mysuru 11–15 February, 2018
8.	Training Programme for the Elementary Teachers of Kerala and Lakshadweep on Planning, Organisation and Effective use of Classroom Library	RIE, Mysuru 26–30 November, 2018
9.	Content Enrichment Programme for Mathematics Teachers at Secondary Level	RIE, Mysuru 24–28 September, 2018
10.	Training Higher Secondary Teachers in Content and Methodology of Teaching Biology	RIE, Mysuru 8–12 October, 2018

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM, MEGHALAYA

Training Programme for KRPs of North-Eastern Region on Learning Outcomes at the Elementary Stage

The training programme was held at NERIE, Umiyam from 21 to 25 January, 2019. A total of 26 participants attended the training programme from across North-Eastern States. The areas covered in the programme training were Learning Outcomes in EVS, language, science and social science. Some Group work-cum-presentation in the form of development of exemplar was conducted during the training programme.

Training for Key Resource Persons in Developing Proficiency in English for the State of Arunachal Pradesh

The requested programme from the State of Arunachal Pradesh for the senior secondary teachers was conducted at SCERT, Itanagar, Arunachal Pradesh. The teacher educators were oriented on the importance of language skills and how to develop students' competencies in English. They were also updated on effective strategies to improve the language skills. Importance of inputs like authentic materials, magazines and newspapers, audio and video clips were discussed in the programme. Demonstration lessons on prose, poetry and grammar were conducted. The language skills viz., listening, speaking, reading, and writing and how they could be integrated effectively in the lessons were discussed.

Training for Key Resource Persons in Phonetics and Spoken English at the Primary Level for the State of Sikkim

On the basis of the request received from the state of Sikkim, the teacher educators were oriented on the sounds of english and stress and intonation patterns. They were apprised of the sounds that cause difficulty due to the impact of the mother tongue. The teacher educators developed activities which they could use besides the existing teaching learning materials. The areas covered in the training programme were organs of speech, vowels and consonant sounds, stress and intonation, english syllables and spoken english.



Training of Teacher Educators on the Constructivist Approach on Teaching Learning of English at the Elementary Level for the State of Nagaland

The programme was conducted at SCERT, Kohima, Nagaland in which the teachers and teacher educators were oriented on the theories of constructivism and language learning. They were also exposed to how constructivism can be used in the classroom for making learning effective and joyful. The areas taken up in the five-day training programme were constructivism in language teaching, constructivism in the language skills, constructivism and the teaching of grammar, cooperative learning and assessing learners. The sessions were interactive and incorporated the use of ICT. Teacher educators also presented lessons using the constructivist approach.

Training on Textbook Development-cum-Analysis at Secondary Level for the North-East Region

The programme was conducted with the given objectives—to orient the KRPs on the role of textbooks in education, to sensitise the KRPs on the key components involved in textbook design, appropriateness of content, illustrations, systemic issues and concerns in textbook writing and production and to empower the KRPs on the procedures and techniques of evaluating school textbooks. KRPs from the States of Meghalaya and Manipur participated in the programme. The programme had sessions on the current practices of textbook development in Meghalaya and Manipur, technical procedures in writing and production of textbook, textbook designs and the teaching of social science and language, criteria and guidelines for the development of an ideal textbook, sharing of tools for textbook analysis in social science and language, textbook analysis by the participants, group work presentations, etc.

Training of KRPs on Pedagogy of Social Sciences (Secondary Level) for North-Eastern States

The training programme was conducted at NERIE, Umiam in which participants from the States of Arunachal Pradesh, Assam, Meghalaya, Mizoram, Nagaland, and Sikkim attended the programme. Resource persons from RIE, Bhopal, NERIE, Umiam, and NEHU engaged the participants on various pedagogic transactions based on the constructivist approach.

Capacity Building for Teacher Educators on Curriculum Development and Analysis for the State of Meghalaya

The State was in the process of developing State Curriculum Framework. Hence, the training programme was organised with the given objectives—to enable the teacher educators to understand the guiding principles and philosophy of curriculum development; to analyse contextual issues related to curriculum development; to understand curriculum design and curriculum mapping; and the linkage between curriculum, syllabus, pedagogy and assessment, etc.

Training of KRPs in Developing Proficiency in English for the States of Assam and Arunachal Pradesh

The programme was held at SCERT, Assam which was attended by 39 teachers, BRP and CRCCs of Assam. The areas covered in the training programme were general skills on language, teaching of grammar, assessment and construction of test items and learning objectives.



Training of KRPs on Teaching in Multilingual Class at Primary Level for Tripura State

The training programme was held at SCERT, Tripura in which 36 higher secondary school teachers from Tripura participated. The areas covered in the training programme were nature of language, functions of language, theories of language acquisition and language learning, role of mother tongue in the cognition of the child, the need of multilingual education and assessment of learning outcomes.

Orientation for Master Trainers on Pedagogical Evolution in Inclusive Classroom at Secondary Level

The purpose of the programme was to sensitise the Master Trainers with uniqueness and educational needs of CWSN in teaching-learning process and to acquaint the Master Trainers with the pedagogical trends and recent developments in inclusive classroom teaching. The programme was organised at NERIE, Umiam from 28 January to 1 February, 2019. A total of 23 participants from seven States viz., Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, and Sikkim attended the programme. They were given inputs about the concept and hands-on-practice about Sensory Processing Disorder (SPD) challenges among SLD Learners (Assessment and Intervention), Universal Design for Learning and its implementation for inclusive education, ICT for Special Needs and demonstration on educational software e-Saadhya.

Details of Training/Orientation/Capacity Building Programmes Organised

S. No.	Title of the Programme	Venue and Dates
1.	Training Programme for KRPs of North-Eastern Region on Learning Outcomes at the Elementary Stage	NERIE, Umiam 21–25 January, 2019
2.	Training for KRPs in Developing Proficiency in English for the State of Arunachal Pradesh and Assam	SCERT, Assam 21–25 January, 2019 SCERT, Itanagar 18–22 February, 2019
3.	Training for KRPs in Phonetics and Spoken English at the Primary Level for the State of Sikkim	SCERT, Gangtok 13–17 November, 2018
4.	Training of Teacher Educators on the Constructivist Approach on Teaching Learning of English at the Elementary Level for the State of Nagaland	SCERT, Kohima 11–15 March, 2019
5.	Training of Master Trainers on Developing Quality Questions in Science and Social Sciences at the Secondary Stage for the State of Sikkim	SCERT, Gangtok 6–10 August, 2018
6.	Training on Textbook Writing at the Elementary Level and Textbook Analysis at the Secondary Level for the North-Eastern States	NERIE, Umiam 25 February – 01 March, 2019
7.	Training for Teacher Educators on Dealing with Learning Disabilities amongst School Students at the Lower Primary Level for North-Eastern States	NERIE, Umiam 5–9 March, 2019



8.	Certificate Course in ECE	NERIE, Umiam 16 July – 12 October, 2018
9.	Training of SCERT Faculty of North-Eastern States on Stress Management Techniques	NERIE, Umiam 11–15 March, 2019
10.	Capacity Building of SCERT and DIET Faculty of North-Eastern States on Guidance and Counselling	NERIE, Umiam 10–14 September, 2018
11.	Capacity Building of KRPs on the use of Science Kits at the Upper Primary Level for North-Eastern States	NERIE, Umiam 8–12 October, 2018
12.	Training of KRPs on Pedagogy of Social Sciences (Secondary Level) for North-Eastern States	NERIE, Umiam 18–22 February, 2019
13.	Training of KRPs on Teaching in Multilingual Class at the Primary Level for Tripura State	SCERT, Tripura 28 January – 1 February, 2019
14.	Capacity Building for Teacher Educators on Curriculum Development and Analysis for the State of Meghalaya	NERIE, Umiam 23–27 July, 2018
15.	Diploma Course in Guidance and Counselling through Distance/Online and Face-to-Face	NERIE, Umiam January – December, 2018
16.	Training of KRPs on Science Education at the Elementary and Secondary Level for the North-Eastern States	NERIE, Umiam 26–30 November, 2018
17.	Orientation for Master Trainers on Pedagogical Evolution in Inclusive Classroom at Secondary Level	NERIE, Umiam 28 January – 1 February, 2019





6. Extension Activities

The NCERT extends its operation in the form of organising international and national conferences, national as well as regional meets, seminars, national and regional level competitions, regional review workshops, camps and sensitisation workshops, extension lectures, book exhibitions, melas, youth festivals, etc., to reach out to its stakeholders across the country. In the year under report, the Council has organised several national and regional seminars and conferences to share, discuss, and disseminate on various issues pertaining to the area of school and teacher education.

In partnership with UNESCO, Asia-Pacific Centre of Education for International Understanding (APCEIU) and Korean Funds-in-Trust Project, the Council organised a Sub-Regional Meeting-cum-workshop on 'Integrating SDG 4.7 and Global Citizenship Education into Teacher Training in South Asia'. The NCERT also organised a consultation meeting of stakeholders in Environmental Education (EE); national conference on Achieving Sustainable Development Goals 2030, pre-internship conference for co-operating school teachers of JNVs, and orientation programme for co-operating school heads for SAP, etc. Various activities were conducted in connection with the celebrations of Independence Day, Republic Day, Mother Tongue Day, Sanskrit Week, International Week of Arts Education, Science Day, International Yoga Day, National Mathematics Day, International Women's Day, Baba Saheb Bhim Rao Ambedkar Jayanti, World Youth Skills Day, National Education Day, National Science Day, World Environment Day, 125th Year of Swami Vivekananda's Famous Speeches at World Parliament of Religion at Chicago 1893, 150th Birth Anniversary of Mahatma Gandhi, Munshi Premchand's birth anniversary, and Swachhta Abhiyan.

Various exhibitions viz; state level Science, Mathematics, and Environment Exhibitions (SLSMEE) for Children, 42nd Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for children and book exhibitions were organised by the Council. During the year, it developed and maintained the Resource Centre in Science and Mathematics Education, Centre for Popularisation of Science through Biodiversity park and Science park and a Resource Centre for arts and crafts.

The Council organised Yoga Olympiad, *Kala Utsav*, National Role Play, and Folk Dance Competition, *Hindi Pakhwara*, and artist camp. It has extended academic support to the IIT nursery school, an experimental school of NCERT and early childhood education programme in D.M. School. The constituent units of the Council also organised Extension Lecture Series, Academic

Forum, and Expression Series to commemorate the life and works of the great Indian thinkers with special reference to the concerned region. As a part of its pre-service education programme, the Council conducted programmes on working with the community, internship in teaching programme, and school exposure programmes.

DEPARTMENT OF CURRICULUM STUDIES

National Conference on Emerging Issues in School Curriculum

A national conference on Emerging Issues in School Curriculum was conducted at NIE, New Delhi from 5 to 7 March, 2019. The conference was inaugurated by Hrushikesh Senapaty, *Director*, NCERT. The objectives of the conference were to share perspectives of States and UTs and their experiences of curriculum implementation to share researches, initiatives, and policy perspectives on emerging issues in curriculum for school education for future curriculum reforms to bring out a monograph containing emerging issues presented in the conference for wider dissemination. States and UTs viz., Assam, Bihar, Jharkhand, Haryana, Delhi, Uttarakhand, Karnataka, Madhya Pradesh, Tamil Nadu, Chhattisgarh, Jammu and Kashmir, Puducherry, Odisha, Manipur, and Meghalaya took part in the conference along with NCERT faculty members and representatives from CBSE, KVS, NVS, and NIOS. The conference discussed the current status of school curriculum in the participating States and UTs and also issues to be addressed in the next curriculum reform.



M.A. Khader, Retd. Professor from NCERT addressing the participation of the National Conference on Emerging Issues in School Curriculum

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Consultation Meeting of Stakeholders in Environmental Education (EE) from Different States and UTs



Expert and Participants from different States and UTs engaged in discussion during the stakeholders meeting on Environmental Education

A meeting of stakeholders in Environmental Education (EE) from different States and UTs was held at NIE, New Delhi on 21–22 February, 2019. The meeting was attended by 50 participants representing different States, UTs, NGOs, other institutions, RIEs, and different departments of NIE. The objectives of the two-day meeting were to bring together the different stakeholders of Environmental Education in the country that includes States, UTs, Boards, and



organisations, to take stock of the initiatives undertaken by the stakeholders and to come up with recommendations for the improvement of the implementation of environmental education.

Centre for Popularisation of Science

Popularisation of science is one of the major thrust areas of DESM, NCERT. It is an ongoing programme under which two centres, namely, *Science Park* and *Herbal Garden* operate. DESM has developed two herbal gardens at the NCERT Campus. Students, teachers, and teacher educators frequently visit these herbal gardens. The gardens have around 200 medicinal plants. The science park is an open air park in which working models provide hands-on experiences to children, teachers, teacher educators, NGOs, and other functionaries concerned with the teaching of science in schools to understand and appreciate certain selected principles of science. This extension programme provides guidance to schools in developing similar parks and gardens in their institutions.

For inculcating a scientific temper among all, the department also celebrates many important days dedicated to science under this programme. As part of the celebration of World Environment Day on 5 June 2018, a panel discussion on the topic Management of Water Resources— Challenges and Ways Ahead, was organised by the department. The three panelists S.P. Gautam, *Former Chairman*, Central Pollution Control Board, Delhi, Jaishree Sharma, *Former Head*, DESM, NCERT, New Delhi, and Dinesh Kumar, *Head*, DESM, NCERT, New Delhi deliberated on the topic and faculty members from different departments actively participated in the discussion.

45th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2018

NCERT has been organising National Science, Mathematics and Environment Exhibition for Children since 1971. National exhibition is organised by the NCERT every year in collaboration with a State or a Union Territory on rotation basis. The primary objective of the exhibition is to provide a forum for school children to present their understanding of science and mathematics, creative ideas, innovativeness, and sensitivity on local as well as global issues through



Glimpses of popularisation programmes conducted during 2018–19



45th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2018



working models and exhibits. The 45th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children was organized at Sardar Patel Stadium, Navrangpura, Ahmedabad from 23 to 28 November, 2018 by the department in collaboration with the Education Department, Government of Gujarat. It was inaugurated by the Hon'ble Chief Minister of Gujarat, Vijaybhairu Rupani. Main theme of the 45th JNNSMEE for Children 2018 was Innovation for Sustainable Development. A total of 170 exhibits were selected at the NCERT level and invited to participate in JNNSMEE 2018. These were drawn from twenty-two States and Union Territories, Kendriya Vidyalaya Sangathan, Navodaya Vidyalaya Samiti, CBSE affiliated independent Public Schools, Department of Atomic Energy Central Schools, etc. The exhibition was visited by more than 50,000 students and teachers.

State Level Science, Mathematics and Environment Exhibition (SLSMEE) for Children

The State Level Science, Mathematics and Environment Exhibition for Children 2018–19 is the first phase of preparation for the organisation of Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2019. For organising these exhibitions, guidelines were developed by DESM on the theme 'Scientific solutions for challenges in life' and shared with the States and UTs. Till 31 March 2019, 28 States and UTs have conducted their State Level Science, Mathematics and Environment Exhibition for Children 2018–19. A catalytic grant has been disbursed to 24 States and UTs for organising the state level exhibitions. Throughout the year the activities of the States were monitored and necessary guidelines were provided from time to time. Selected entries from all of these will participate in JNNSMEE 2019.

Seventh National Conference on Mathematics Education

The conference was organised at NIE, New Delhi from 20 to 22 December, 2018. The objectives of the conference were to provide a platform to share the best practices of teaching mathematics, to learn from each other the concerns and challenges in teaching of mathematics and to provide practicing teachers to share their experiences in using ICT for teaching mathematics. The themes of the conference were Assessment in Mathematics Education, Innovative Practices in Mathematics Education, Issues and Concerns in Mathematics Learning and Development in Mathematics Education, Past and Present. A total of 67 papers were presented in the conference.

National Conference on Ancient Indian Knowledge: Science and Technology

A national conference on Ancient Indian Knowledge: Science and Technology was organised at NIE, New Delhi from 17 to 19 July, 2018. The objectives of holding the conference were to create awareness about the evidence based Ancient Indian knowledge in science, mathematics, and technology and to create a network of historians, educationists, and



Poster Presentation during the National Conference on Ancient Indian Knowledge: Science and Technology



across the nation for continuous exchange of ideas on Ancient Indian knowledge in science, mathematics, and technology so as to identify, appreciate, and integrate linkages between the ancient Indian scientific knowledge and perspectives of modern science and technology. Twenty seven participants presented their papers. The conference has provided the vision in various aspects in the area for school education. Learning of ancient languages may be encouraged to read and understand ancient Indian text. Researches in this area may be encouraged as it may provide insights for solving many problems in the present context. Ancient wisdom such as Ayurveda, Astronomy, etc., have contemporary applications.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Meetings of Minority Cell and Activities of Minority Cell

Meetings of Minority Cell for the year 2018–2019 were held at RIE, Bhubaneswar on 3 October, 2018 and at NERIE, Umam on 3 February, 2019. The objectives of these meetings were— to ensure implementation of the directives of various ministries and commissions regarding the minorities' education, to do follow-up of all the programmes and directives on Minorities' education within the Council and to suggest the Constituent Units of the Council regarding the academic activities to be undertaken in Minority education from time to time. The department also organised a workshop for the analysis of research findings and deriving implications on education of Minorities at NIE, New Delhi from 18 to 20 July, 2018.

Poster Competition

NCERT celebrated its 58th Foundation Day on first September, 2018. As part of the celebration, the department organised a poster competition on the theme 'Making Schools Inclusive' with the aim to promote awareness and sensitivity about the CWSN and barriers in addressing their needs, among the pre-service teacher trainees pursuing B.Ed., B.El. Ed., ECCE, and D.El.Ed. from various institutions in Delhi. The department received 120 poster entries on sub-themes such as understanding RPWD Act, 2016, inclusive classrooms, inclusive sports, inclusive laboratories, inclusive libraries, and inclusive ICT. Out of these 120 poster entries, 10 merit certificate winning posters were selected. These 10 posters were part of the department's exhibit on the foundation day. Consequently, certificate distribution event was organised at NIE, New Delhi on 25 October, 2018.



Rina Ray, Secretary, MHRD along with Hrushikesh Senapaty, Director, NCERT visiting the stall of ESD during the Foundation Day Celebrations of NCERT



DEPARTMENT OF TEACHER EDUCATION

Conference of Directors of SCERTs/SIEs

The Conference of Directors of SCERTs and SIEs was organised by the Department of Teacher Education for the year 2018–19 at NIE, New Delhi on 17–18 January, 2019 with the objectives to discuss the issues and concerns of mutual interest in the area of school and teacher education, to share of the achievements of SCERTs and SIEs, to develop strategies for implementation of various schemes and programmes, projects of NCERT and MHRD and to share the programmes and activities of NCERT's constituents. In his inaugural address, H.K. Senapaty, *Director*, NCERT shared the concerns and vision of NCERT.



Conference of SCERT-SIE Director

He also shared about the Learning Outcomes at the Elementary Stage prepared by the Council and National Achievement Survey (NAS) conducted by NCERT. 21 States and UTs participated in the conference.

National Awards for Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions



National Seminar National Awards for Innovative Practices and Experiments in Education for school and Teacher Education Institutions

In the early sixties, the NCERT launched the scheme 'Seminar readings programme for teachers and heads of secondary schools,' from time to time, changes were made in the scheme and its scope was widened with regard to its nomenclature, nature of participants, eligibility criteria, specification of themes, short listing of papers, number of awards, amount of cash prize, procedure of submission of papers, eligibility

of cash prize, etc., 2017–18 onwards the scheme for award has been revised. The main objectives of the scheme are:

- ❑ To sensitise teachers and teacher educators about the potential of innovative practices and experiments for improvement of teaching learning;
- ❑ To encourage teachers and teacher educators to try out novel ideas and practices for improvement of different areas of school education and teacher education;
- ❑ To encourage teachers and teacher educators to identify problems they face and adopt a realistic approach to find solutions, thereof;
- ❑ To create an environment in schools and teacher education institutions by encouraging innovations so as to ensure their sustainability; and



- ❑ To provide a forum to teachers and teacher educators to share their innovative ideas with all stakeholders.

The national seminar was organised on 28–29 June 2018. Selected teachers and teacher educators were invited to present the report in the seminar. A total of 25 teachers and teacher educators were awarded with cash award of ₹ 10,000 and a certificate.

DEPARTMENT OF ELEMENTARY EDUCATION

National Consultation Meet on CCE held at NCERT

A national consultation meet on Continuous and Comprehensive Evaluation (CCE) was organised at NIE, Delhi with support from UNICEF. Representatives of all the States, UTs, CBSE, Kendriya Vidyalaya Sangathan and Jawahar Navodaya Vidyalaya participated in the meet. The status of CCE in the States, UTs, and different organisations was taken besides sharing the new guidelines on CCE prepared by NCERT. The suggestions obtained were suitably incorporated in the document. The report was prepared and shared with all participants and UNICEF.

A National Consultation on Preschool Curriculum and Guidelines for Preschool Education

The national consultation was organised on 13–14 August, 2018. The pre-school curriculum and guidelines were shared with the participants who were from different SCERT, SIE, RIEs, UNICEF, World Bank, Universities, ECCE Experts, National and International NGOs, and local schools. The participants were divided into groups. Each group shared their views and gave suggestions for addition, deletion, or modification in the content. It was further deliberated in the larger group. The document has been finalised after incorporating the suggestion given in the consultation meet.

Regional Meets for Capacity Building of Key Resource Persons from States and UTs on Continuous and Comprehensive Evaluation (CCE)

Four regional meets were conducted for the States and UTs to bring a consensus of all the States and UTs in reformulating and implementing CCE as per NCERT guidelines. The representatives from SCERTs, DIETs of all States and UTs UNICEF, World Bank, Kendriya Vidyalaya Sangathan, Jawahar Navodaya Vidya Sangathan attended the national meet. The regional meets covered stakeholders of States and UTs from Northern, Southern, and North-Eastern Regions. About 300 participants (SCERTs, DIET faculty, and Pedagogy coordinators) of all the States and UTs of the respective regions participated.

Regional Workshop on Orientation of the Preschool Curriculum and Guidelines for the Preschool Education

During the year, the following regional workshops for the orientation on the Preschool Curriculum and Guidelines were conducted for the States and UTs.

- ❑ The first regional workshop was held for the west-zone at RIE, Bhopal from 14 to 15 November, 2018 where five States and UTs viz., Dadra and Nagar Haveli, Goa, Gujarat, Maharashtra, and Madhya Pradesh participated.
- ❑ The second regional workshop for north zone States and UTs was held at RIE, Ajmer, Rajasthan from 28 to 29 November, 2018. The total number



of participants was 32. The participating States and UTs were Punjab, Chandigarh, Haryana, Uttar Pradesh, Jammu and Kashmir and Himachal Pradesh.

- ❑ The third regional workshop for east zone States and UTs was held at RIE, Bhubaneswar, Odisha from 19 to 20 December, 2018. The total number of participants was 30.
- ❑ The fourth regional workshop for south east zone States and UTs was held at RIE, Mysuru, Karnataka from 3 to 4 January, 2019. The total number of participants was 31.
- ❑ The fifth regional workshop for north east zone States and UTs was held at Guwahati, Assam from 8 and 9 January, 2019. The total number of participants was 31.
- ❑ The sixth regional workshop for north east zone States and UTs was held at Imphal, Manipur from 26 and 27 February, 2019. The total number of participants was 35.
- ❑ The seventh regional workshop for central zone States and UTs was held at NIE, New Delhi from 7 and 8 January, 2019. The total number of participants was 33.
- ❑ The eight regional workshop for hilly zone States was held at Shimla, Himachal Pradesh from 26 and 27 March, 2019 (on demand). The total number of participants was 42.



Participants engaged in group discussion during the national consultation on Preschool Curriculum and Guidelines for Preschool Education

DEPARTMENT OF EDUCATION IN LANGUAGES

Celebration of Munshi Premchand's Birth Anniversary

As part of the celebration of the birth anniversary of the well-known writer, thinker, and reformer, Munshi Premchand, Vishwanath Tripathi, *author, critic, and noted academic* delivered a lecture on Premchand's life and intellect. Two stories of Premchand, 'Bade Bhai Sahab' and 'Chori' were enacted by the group Mukha-Mukham, New Delhi on 31 July, 2018. Teachers, teacher educators, researchers, and members of the NCERT faculty participated in the programme. Vishwanatha Tripathi, in his deliberation on the work and life of Munshi Premchand, pointed out the purpose and foresightidness of the writer and relevance of the same in the present society.

Samvaad Lecture Series

Department of Education in Languages, NCERT organised a series of lectures, art, and cultural events under the umbrella programme of Celebration of



Mother Language Day and Samvaad: Lecture Series on Language and Language Education. The objectives of the ‘Samvaad’ programmes are to bring in teachers, teacher educators, pedagogues, and learners to discuss and debate on the various aspects of language, literature, pedagogy in society and school education to create awareness and for the germination of new ideas on aspects of language and literature and their implications on school education.

The second lecture in the series on Bharatvanshi Bhasha Evam Sanskriti by Pushpita Awasthi, *Director*, Hindi Foundation, Netherlands was held at NIE, New Delhi on 3 December, 2018. Awasthi, in her talk traversed through the evolution of Hindi in the soils outside India and its influence in India and elsewhere. She discussed the socio-political contexts and life in Mauritius and in Netherlands and the status of Hindi and its role in the educational and social lives of people of the Indian origin. The talk was attended by teachers and teacher trainees from various DIETs of Delhi, NCERT, etc.

The fourth lecture in the Samvaad series was held on 14 March, 2019 as a tribute to the well-known critic, writer, and thinker Namwar Singh. Purushotham Agarwal, noted Hindi Critic and Chief Adviser of the Hindi language textbooks of NCERT delivered the lecture by sharing his thoughts on Hindi criticism and language today and the contribution of Namwar Singh to the Hindi language and criticism. He brought out the path breaking thinking and contributions of Namwar Singh and how the new generation of criticism emerged with the work and initiatives of critics like him. NCERT faculty also remembered his works and his contributions to the development of language curriculum and (Hindi, Sanskrit, Urdu and English) textbooks developed by the NCERT as a follow up of *NCF 2005*.

Celebration of Mother Tongue Day

International Mother Tongue Day was celebrated at NIE, New Delhi on 21 February, 2019 with a lecture and an event of storytelling in Urdu. The day is observed every year, as a mark of recognition for the right of every linguistic community to use their mother tongue for their schooling and other functions in the society, to promote linguistic and cultural diversity and multilingualism. Uday Narain Singh, *Former Director*, Central Institute of Indian Languages and eminent linguist, delivered a lecture titled ‘Whither Shall we Wander?’. His lecture explored the uniqueness and abstract nature of language which is embedded in the lives of people and cultures. This was followed by storytelling in Urdu—*Dastangoi*.



Celebration of International Mother Tongue Day

National Seminar on Integration among Indian Languages

A two-day national seminar on Integration among Indian Languages was organised on 6–7 February, 2019 for the development of compendium of multilingual pedagogy. The experts who participated in the seminar delivered



lectures on the Integration among Indian languages and their journey and issues related to the pedagogy of language. The objective of the seminar was to establish the basis of multilingualism and its use in the area of education. There were twelve experts who presented papers, articles, and delivered lectures.



Two-day national seminar on Integration among Indian Languages

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

Yoga Olympiad

NCERT is taking multidimensional initiatives to promote yoga in schools. Yoga Olympiad is one such initiative. For the first time, Yoga Olympiad was organised to generate awareness about the benefits of yoga on health holistic and developments of healthy habits. During the Yoga Olympiad, Yoga practices like Asanas, Pranayama, *Kriya* (cleaning) and meditation were performed by States and UTs. A total of 517 students along with their 90 teachers from 26 States and UTs participated in the Yoga Olympiad from 18 to 20 June, 2018. The number of boys that participated from the upper primary and secondary stage was 219 and the number of girls that participated from the upper primary and secondary stage girls was 208. The programme was inaugurated by Eric Falt, *Director and UNESCO representative to India, Bhutan, Maldives, and Sri Lanka.*



Performance of Students during National Yoga Olympiad 2018

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

National Seminar on Status of Arts Education in India: Practices, Issues and Challenges

The department organised the national seminar to document the status and implementation of arts education as well as to share the achievements in all the States and UTs from 3 to 5 August, 2018. Arts education has always been a priority area in the education policy of government of India. *National Curriculum Framework 2005* has also highlighted the need for Arts Education in the school curriculum for the holistic development of the child. Representatives of various States, UTs, KVS, NVS, CBSE, and RIEs gave presentations highlighting the practices of Arts Education practiced by them. Though representatives from all States, UTs, CBSE, RIEs, KVS and NVS were invited. Twenty-one of them



attended the seminar, which included SCERT, RIEs, and other faculty members. The states of Assam, Tamil Nadu, Gujarat, Madhya Pradesh, Rajasthan, Mizoram, Meghalaya, Maharashtra, Uttarakhand, Chhattisgarh, Haryana, and West Bengal, Central Board of Secondary Education, Kendriya Vidyalaya Sangathan, Navodaya Vidyalaya Samiti, RIE, Bhubaneswar and RIE, Bhopal. Apart from that, some plenary sessions were held in different fields viz., Music, Design Education, ICT and Arts Education, Role of Museum in School Education for sensitisation of the participants. In spite of initiating various activities at different levels, there are serious concerns regarding the implementation of the arts education curriculum in schools, status of teachers, attitude of authorities and parents to support arts education at all levels.

DIVISION OF EDUCATIONAL KITS

Supply Chain Mechanism of School Kits

In order to cope with the mass production and supply of educational school kits to users, NCERT on directions of MHRD, empanelled 16 firms to manufacture and supply these kits. Under the Central Government flagship programmes of *Samagra Shiksha Abhiyan*, State Governments are procuring the educational kits on a large scale, either directly from NCERT or from NCERT's empanelled firms. The educational kits have been showcased in different national events and book fairs across the country.

PLANNING AND MONITORING DIVISION

Sharing of Experiences of Educational Practices in States: Meeting with State Coordinators of RIEs



State Coordinators of RIEs sharing the needs of the States/UTs and the educational practices in the Sharing Meeting

For the sharing of experiences of educational practices with States and UTs, the division organised consultative meeting between the State Coordinators of RIEs and Heads of NIE Departments/Divisions/Cells as well as Joint Directors of CIET and PSSCIVE, Bhopal. The meeting also provides a forum to different constituents to share their achievements to be disseminated in the States and workout with States for evolving realistic need assessment commensurate with the expertise

available with NCERT for addressing the needs of States and UTs. During the year 2018–19, the meeting was held at NIE, New Delhi from 7 to 9 August 2018, in which the State Coordinators of all the RIEs participated.

INTERNATIONAL RELATIONS DIVISION

Sub-Regional Meeting-cum-Workshop on 'Integrating SDG 4.7 and Global Citizenship Education into Teacher Training in South Asia'

The four day Sub-Regional meeting-cum-workshop on 'Integrating SDG 4.7 and Global Citizenship Education into Teacher Training in South Asia' was



organised by IRD at NIE, New Delhi from 26 to 29 June, 2018, in partnership with UNESCO, Asia-Pacific Centre of Education for International Understanding (APCEIU) and Korean Funds-in-Trust Project on Preparing Teachers for Global Citizenship Education. The objectives of the programme were to equip senior officials of the leading national teacher training institutes of Bangladesh, Bhutan, India, Maldives, Nepal, and Sri Lanka with knowledge and skills of SDG 4.7; to provide them with innovative and appropriate pedagogies; to discuss how best SDG 4.7 can be integrated part into teacher training; and to explore areas for potential cooperation in South Asia. Overall, 21 representatives from the said countries participated in this meeting, apart from the eight representatives of the UNESCO and APCEIU.



Inaugural of the Sub-Regional Meeting on Integrating SDG 4.7 and Global Citizenship Education (GCED) into Teacher Training in South Asia and Participants from South Asian countries engaged in the sessions

Memorandum of Understanding (MoU)

An MoU (approved by the MHRD, GoI) between NCERT and Curtin University was signed on the 2 July, 2018 at Melbourne, Australia in the presence of Prakash Javadekar, *Minister of Human Resource Development*, GoI. Under the provisions of this MoU, the two institutions have agreed to conceptualise and design customised curriculum and training modules for in-service teacher training of elementary, secondary teachers, and teacher educators; identify optimal solutions for delivery, including required technical and logistical support; undertake research and development programmes that encourages teacher engagement and participation; undertake research and propose policy measures to encourage greater participation in continuous professional development of the teachers, identify and support events that enable knowledge sharing and broader participation of other relevant organisations from industry and government, encourage cross organisational student and staff engagement as well as exchanges, develop joint research proposals and cooperate in joint funding submissions, and provide consultation and development support for staff as and when required and as mutually agreed upon.

Joint Working Committee Meeting

The 2nd AKS-NCERT Joint Working Committee Meeting was held at NIE, New Delhi from 9 to 13 December, 2018 under the provisions of the MoU signed between the two institutions in 2017. This meeting was organised by International Relations Division in collaboration with Embassy of the Republic



of Korea, New Delhi. Sixteen delegates from four national level institutions —AKS, KERIS, KRIVET, and NISE — of the Republic of Korea attended the meeting to review the progress of collaboration achieved so far and plan for future activities. The delegates of KRIVET also went to RIE, Bhopal from 12 to 19 December 2018 to carry forward the work regarding mutual collaboration in the field of vocational education between the two institutions.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Updation and maintenance of Websites and Online Activities

Updation and maintenance of 14 websites are being done on day-to-day basis. Dynamic websites— <http://ncert.nic.in>, <http://epathshala.nic.in>, <https://ictschoools.ncert.gov.in>, <https://ictcurriculum.gov.in>; <https://ciet.nic.in>, <https://itpd.ncert.gov.in>, <https://pindics.ncert.gov.in>, <https://nroer.gov.in>, <https://ncertbooks.ncert.gov.in>, <http://kalautsav.in>, <http://aeparc.org>, have been designed during this year. Along with these, Open Educational Resources (OER) portals were designed for Mauritius (<https://ssp.moemu.org>), SCERT-Tripura (<http://scerttripura.org>), and OSRE (osre.ncert.gov.in) and developed by CIET.

Resource-cum Activity Centre in ET and ICT in Education

A summer camp for children in digital learning and multimedia was organised from 4 to 15 June 2018 in which 73 children from Classes V–X attended. There were 30 sessions having various themes and activities such as puppetry, script writing and storyboarding, video and audio production, digital art, photography, animation and ethical use of ICT. Children were exposed to hands-on sessions in order to learn the skills related to the themes covered. The camp was aimed to inculcate the basic ICT skills for creating digital resources in a fun-filled manner. All the regular participants were awarded with certificates for the same.

Automation and Augmentation of CIET Library

A workshop on plagiarism, Mendeley Reference Tool and Koha, was organised on 13 August 2018 for the faculty members and other staff of NCERT. The aim of the workshop was to generate awareness among the participants about the nature of plagiarism being practiced in the field of education and the ways to curb such malpractices. The workshop also aimed to orient on the referencing tool named, Mendeley, which can be used for storing references for academic writings. Along with this, an introduction to Koha and its working was also done, which has a use in automation of libraries. Plan is underway to modernise CIET book library along with that of the media library.

Course Materials for MOOCs on SWAYAM (Funded by MHRD, Higher Education)

Around 242 text modules and 132 videos have been developed for 11 MOOCs. The text modules of physics courses have been updated. Two cycles of the courses have been completed. Nearly 27,000 learners were enrolled in the 20 courses in cycle 1 and 33,000 learners were enrolled in the 23 courses in cycle 2. The courses on educational administration, management and leadership in school education has completed its first cycle on the SWAYAM platform.



REGIONAL INSTITUTE OF EDUCATION, AJMER

Extension Lectures of Eminent Educationists

Eminent speakers invited for the lectures include—N.K. Upadhyay, *Professor* on the occasion of Gandhi Jayanti; G. Ravindra, *Former Director* NCERT on foundation day of the institute that is 30 September, 2018; Sambodh Goswami, *Professor*, University of Rajasthan of Jaipur on *Ekta Diwas* on 31 October, 2018; U.C. Vashisth, *Professor*, on National Education Day; and D.N. Sansanwal, *Retd. Professor* from Sagar University, Madhya Pradesh, spoke on various aspects of educational research during the orientation programme for M.Ed. students. A lecture on national science day was delivered by S.C. Agarkar, *Professor*, and *Dean*, VPM's Academy of International, Education and Research and Bedekar Vidya Mandir, Naupada, Thane, Maharashtra.

Expression Series on Eminent Personalities

On 31 October, the Unity Day was celebrated, in which different activities were conducted and the guest lecture was delivered by Hanuman Singh Ji Rathore on 26 November, 2018. The constitution day was celebrated and the guest Manoj Awasthi, Government College, Ajmer delivered a lecture on the Benefits of Constitution in Indian Democracy on 22 December, 2018. The Mathematics Day was celebrated and the guest, Parihar of GCA, History Department of GCA delivered a lecture on Easy Solution of Theorem. Speeches by students and activities like a quiz were also conducted. On 12 January, the Youth Day was celebrated and the guest Bhupendra Ubana, *Principal*, Adarsh Vidya Niketan School delivered a lecture on Youth Day. Prizes for all the activities held on different occasions, were distributed to the students on the same day by the chief guests.

National Seminar on Learning Outcomes

The seminar was planned with a view to share the best practices, field level experiences, and research in the field of elementary education and right to education with special reference to learning outcomes. The major objectives of the seminar were to provide a forum to give an exposure to all the participants and help them in planning for future strategies for effective implementation of pedagogical strategies focusing on Learning Outcomes. The seminar was organised from 7–9 March, 2019 in which 85 papers were presented. On this occasion, a workshop for teachers and an exhibition of the material developed by different organisations and state educational functionaries was also organised.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Organisation of Extension Lecture Series

Under the programme, lectures of eminent scholars and educationist are organised throughout the year. This year under these series four lectures were organised. The first lecture was held on 5 May 2018 by Amita Dutt, *Professor* Rabindra Bharti, University of Kolkata on 'Rabindranath Thakur and Dance'. She discussed the integration and role of dance in education. Before her lecture; there were beautiful Kathak dance performances by her troupe.

Second lecture was held on 7 September 2018 by Amita Dutt, *Professor*, Rabindra Bharti, University of Kolkata. She delivered a lecture on



‘Indian dance: History and Aesthetics’. In her lecture, she discussed the origin of dance in Indian culture. She also talked about how the dance has emerged from the ancient period.

Third lecture was held on 19 September, 2018 by Piyush Swamy, *Proffesor Emeritus*, University of Sinsinati, USA on ‘Emerging Trends in Science Education: Innovations and Pedagogy’. In his lecture, he discussed emerging trends and innovations and their importance in science education.

Fourth lecture was held on 14 November, 2018 by S.C. Aggarkar, *Professor and Former Director*, Homi Bhabha Centre for Science Education, Mumbai on ‘Emerging Trends in Science Education in India’. In his lecture, he discussed the indigenous scientific knowledge of Indian society and its relevance in the present scenario.

International Conference on Emerging Trends and Innovations in School Sciences

An international conference on emerging trends and innovations in school sciences was held at Regional Institute of Education, Bhopal (a constituent unit of NCERT, MHRD, and Govt. of India) on 6–8 February, 2019 in collaboration with the Madhya Pradesh Council and Technology (MPCOST), Bhopal (M.P.) and Commonwealth Educational Media Easter for Asia (CEMCA), New Delhi.

The major objectives of the conference, inter-alia, were to provide opportunities to science teachers and practitioners to share their innovation practices and research in the field of science education at the school level, to promote excellence and innovations in the current practices of science education at school level across the globe, to promote an understanding about the emerging trends in school science research in developed as well as developing countries and to encourages collaborative efforts to enhance the quality of science education across the globe.

As many as 250 delegates and participants, including teachers, students, administrations, members of society organisations, research scholars, scientists across from the world have attended the seminar.

In the inaugural session of the conference, Shobhit Jain, IAS, *Secretary School Education*, Govt. of Madhya Pradesh, Bhopal, R.J. Rao, *Vice Chancellor*, Barkatullah University, Bhopal were present as the chief guest and guest of honour. Piyush Swami, University of Cincinnati, USA, Sudhakar Agarkar, Homi Bhabha Centre for Science Education, Mumbai, India, Manas Ranjan Panigrahi, CEMCA, New Delhi, India have graced the inaugural session of the conference.

The following major issues associated with school science education of the world in general and that of India in particular, were discussed through paper presentations, brainstorming, focus group discussions, keynote addresses, level open house discussions, keynote addresses, level talks, teachers workshop, exhibitions, and panel discussions along with the seven themes which were— ancient scientific knowledge in recent perspectives, knowledge-skill integration in school sciences; digital media and science education; nurturing scientific creativity; emerging trends in curriculum and assessment in science education; school science for sustainable development; and professional development of science teachers and teachers educators.

A workshop on hands activities pertaining to school science was organised for practicing school teachers to provide opportunities for them perform innovative and scientific activities and experiments pertaining to school sciences.



An exhibition on teaching-learning material related to science teaching at school level was organised for school teachers and participants of the conference. The organisations like Commonwealth Educational Media Centre for Asia, New Delhi; Vigyan Prasar, DST, Govt. of India, New Delhi; Regional Science Centre, Bhopal, Madhya Pradesh; Museum of Natural History, Bhopal, Madhya Pradesh; M.P. Council of Science and Technology, Bhopal, Madhya Pradesh; NCERT constituent Pandit Sundar Lal Sharma Central Institute of Vocational Education, Central Institute of Education and Technology, Publication Division, Divisor of Education Kits, ICT section of RIE, Bhopal have actively participated in the exhibition. A mobile planetarium was also set-up during the conference, to expose school teachers and participants. It was demonstrated that how the planetarium can be a powerful way of transacting many concepts of science at the school level.

The key recommendations of the conference were— India has a grand repository of scientific traditional knowledge and practices which need to be validated through sound scientific research; science should begin at very early stage of education; science should be taught in the integrated manner, not in water tight compartments; efforts need to be made for the development of scientific temper at the early age; professional education of the in-service teachers needs to be based on research and sound pedagogy; teacher research should be fundamental to teaching science at the school stage (close relationship between teaching to research); and pedagogy of science should include project based or problem based approach.

RIE Bhopal Journal of Education—Bi-annual Journal

RIE, Bhopal has launched a journal '*RIE Bhopal Journal of Education*' which is a bi-annual journal. It has got RNI No. and process to obtain ISSN No. is almost complete. There is a systematic procedure to select papers for publication in this journal. The papers are thoroughly reviewed by experts and the members of the editorial board before sending it for publication.

National Seminar on ICT Integration in Education and Learning Analytics

This national seminar was organised by RIE, Bhopal from 15 to 17 March 2019 with an intention to invite experts and researchers working in the country and abroad, to present their works in the field of ICT, particularly their effort to integrate ICT in the teaching-learning process.

Internship Programme

Internship in teaching for B.A. B.Ed., B.Sc., B.Ed. VII semester, and two year B.Ed. III semester programme. A total of 200 students were placed in DMS, KVs, JNVs, and MP government schools to gain the picture of the teaching profession. The objectives of the programme were to provide students overall teaching experiences for their coming future. The programme also offers to look into the challenges and problems of real life classroom situations. It gives the opportunity to gain and experience the field of teaching as it is in real the ground reality.

Working with the Community

Working with the community programme is conducted to provide real-life community experiences to the student-teachers, provide knowledge and skills



to conduct various surveys, case studies, and interviews; create awareness on various socio-cultural and environmental issues and problems; inculcate the value of work in student-teachers; develop leadership skills among student-teachers; develop an understanding of the sharing of responsibility; to encourage participation in various social activities; acquaint student-teachers with the real working culture of the village schools, and provide exposure to student-teachers of remote village living. The student-teachers are assessed on the basis of their active participation in various activities, individual and group presentations and report submission.

In 2018–19 session, the programme was organised in Ichhawar Block of Sehare district. Ichhawar block is the adopted block of NCERT from 8 to 12 October 2018. One hundred and ninety two students of B.Sc., B.Ed. (III Sem.), B.A., B.Ed. (III Sem.), and B.Ed. (I Sem.) classes attended the camp. They conducted surveys in eight villages of the block which was related to literacy, drop-outs, economic status, conditions of the school, facilities available in schools, the social status of women of different groups, the facilities available in the villages. They carried out cleanliness and sanitation campaign in the villages, to spread the message of Swachh Bharat Abhiyaan, literacy, India movement, etc. The villagers actively participated in the programme.

For creating awareness among the villagers on different social issues, students organised cultural programmes in various villages. These programmes were skit, song, dance, drama, etc. The villages also participated in those activities. The students also launched the door-to-door campaign for spreading the message of 'Save the Girl Child'. In groups, they discussed, the issues with the housewives and the villagers. Every evening, students gathered in a meeting and presented the daily reports of their respective groups.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

National Conference on Science Education

The scientific communities as well as policy making bodies, have been expressing great concern about school science education, and have launched several new schemes. A three-day national conference on science education was organised from 29 November to 1 December 2018 to provide a platform to all stakeholders working in the field of science education, to share their experiences, research, innovative practices and their impact in improving the quality of science education in schools and for providing directions for curricular and pedagogic reforms of school science education. Four sub-themes were identified for the conference: curriculum and policy, innovations in science teaching-learning and assessment, professional development and science in informal setting. J. S. Rajput, Padmashree Awardee, *Former Director*, NCERT and H. K. Senapaty, *Director*, NCERT inaugurated the conference as Chief Guest and Guest of Honour respectively. Eminent personalities like M. K. Pataria, *Director*, CSIR-NISCAIR, New Delhi, H. C. Pradhan, *Former Director*, HBCSE, Bombay, Y. K. Vijay, *Vice Chancellor*, V. G. University, Jaipur, S. Chunawala, *Dean*, HBCSE, B. K. Tripathi, *Director*, IUCTE, Varanasi, S. Panda, *Director*, NISER, Bhubaneswar, R. V. Rajkumar, *Director*, IIT, Bhubaneswar delivered key note lectures.



ECCE Center in DM School

The institute runs an ECCE center with the objective to organise developmentally appropriate practices for preschool children. Twenty five students each in lower pre-primary and upper pre-primary classes were admitted on the basis of random selection. Weekly action plan and corresponding activities that is, physical development, language development, socio-emotional, and cognitive development were prepared for the implementation of the programme. A format on developmental profile of students was developed depicting developmental characteristics of preschoolers. Frequent interaction sessions with parents were organised. The parents were oriented on pressures on pre-scholars, promoting an enabling environment at home, play and early education, assessing young children, and other relevant areas. The programme was evaluated by collecting feedback from parents, team members, and children. Parents found the programme very relevant and developmentally appropriate. Center based researches on school readiness of children revealed that children scored high in cognitive and socio-emotional dimensions.

Internship in Teaching of B.Ed. III Semester

The internship was organised in three phases such as pre-internship, internship, and post internship. The pre-internship programme was held at RIE, Bhubaneswar from 26 to 29 June 2018 including cooperating school teachers conference. The student teachers were placed in eighteen JNVs located in Bihar, Jharkhand, Odisha, and West Bengal from 2 July 2018 to 20 October 2018 for internship. Student teachers were involved in different activities such as observation of classes of cooperating teacher, peer observation, unit plan and lesson plan, teaching, conducting action research, developing teaching learning materials and achievement test and maintain reflective diary, etc. All the faculty members of the institute and concerned cooperating teachers and the principals supervised the internship programme. Post internship programme was held at institute from 22 to 26 October, 2018 for sharing of innovations, challenges, and experiences.

EXTENSION LECTURES

The extension lecture series intends to contribute to the development of professional identity to the faculty and students of the institute and teachers of D.M. School by facilitating the process of knowledge sharing. Under the extension lecture series, the following lectures given in the table were conducted during the year 2018–19 for the benefit of staff and students of the institute. All the lectures were followed by interactive sessions wherein the students were given opportunity to interact with the experts on the concerned issues.

S. No.	Topic	Name of the Expert
1.	Quality Concerns in Teacher Education.	Mahesh Chand Sharma, <i>Director</i> , Teacher Education, UNICEF, New Delhi.
2.	Contemporary Issues in Teacher Education in the 21st Century	Anil Kumar Shukla, <i>Vice Chancellor</i> , Mahatma Jyotiba Phule Rohilkhand University, Bareilly
3.	Education as a Subject and as a Discipline	Umesh Chandra Vashistha, <i>Professor</i> , Central Institute of Education, Delhi



4.	Peace Education	Jayadeba Sahoo, <i>Professor</i> , Rajiv Gandhi Central University, Itanagar, Arunachal Pradesh
5.	Why to Study History of Literature	Jatindra Kumar Nayak, <i>Former Head</i> , Department of English, Utkal University
6.	Hazards and Disasters and Their Management	Pradeep Mohapatra, <i>Former Principal</i> , Bhawanipatna College, Kalahandi
7.	Types of Cybercrime and Awareness	Akhaya Nayak, <i>Inspector</i> , Crime Branch, Berhampur

PANDIT SUNDARLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

Extension Lecture Series

The extension lecture on 'Vishwa Bhasha banane mein Hindi ke samaksh chunoutiyan' by Kailash Chandra Panth, *Minister-Director*, Madhya Pradesh Rashtra Bhasha Prachaar Samiti, Bhopal was organised on 11 May 2018. The officers, staff, and teachers of training programme were present during the event.

Celebration of International Yoga Day

As part of the celebration of the International Yoga Day, a warming up session followed by a session on Asanas as per the guidelines given by the Ministry was conducted. These included Asanas in standing positions (such as *Tadasan*, *Vrukasan*, etc.), in seating position (*Bhadarsan*, *Shashankasan*, etc.), sleeping position on stomach (*Bhujanhgasan*, *Makrasan*, etc.) and sleeping position (*Sarvangasan* and *Shavasana*). It was followed by Pranayam. During this function, various Yoga Aasanas along with their benefits were explained by yoga experts.



International Day of Yoga

Health Camp for Staff of PSSCIVE, Bhopal

Health camp was organised for the staff of the institute from 25 to 27 June 2018. Nalok Bannerjee, *MD, Advisor* and Sajal Deo, *Pulmonologist* from National Institute for Research in Environmental Health (NIREH), Bhopal visited the institute. Health check-up was done for the staff of the institute.

Silver Jubilee Celebration PSS Central Institute of Vocational Education

PSS Central Institute of Vocational Education (PSSCIVE), Bhopal celebrated its 25th Foundation Day on 5 July, 2018. To mark the beginning of the celebration, blood donation camp, quiz competition, drawing and painting



competition, and planting of saplings at the campus were organised on the fourth of July 2018. Rajesh P. Khambayat, *Joint Director*, PSSCIVE, Bhopal inaugurated the programme by planting saplings at the campus. All the faculty and staff members participated by planting more than 50 saplings. Twenty four students from Demonstration Multipurpose School (Bhopal) Jawaharlal Nehru School, Army Public School, *Sharda Vidya Mandir*, Bank Officers' Public Higher Secondary School, Delhi Public School, Bal Bhawan School, All Saint School, Kopal Higher Secondary School, NHLP School, SCOPE Public School and St. Mont Fort School, participated in the quiz competition. Drawing and painting competition was based on the theme 'Bhopal—City of Lakes' and 'School *Chale Hum*' in which 23 students participated from Demonstration Multipurpose School and NHLP School. Blood donation, lectures on 'The Challenge of Skill Development in India' by an eminent economist and educationist Santosh Mehrotra, *Professor*, Economics, Centre for Informal Sector and Labour Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi. Initiatives taken up by the RIE and eco-friendly practices adopted by RIE, Bhopal, by N. Pradhan, *Principal*, RIE, Bhopal, and 'Challenge of Skill Development in India' by Santosh Mehrotra, *Professor* PSSCIVE, Bhopal, a video presentation on the journey of 25 years of service of PSSCIVE, Bhopal, release of the publication titled 'Glorious Past to Inspiring Future', a panel discussion on 'Skilling for the New and Transforming India', etc. were conducted.

Celebration of World Youth Skills Day

The institute celebrated world youth skills day on 16 July, 2018 at Ninad Auditorium of the institute. More than 200 students, teachers, teacher educators, faculty and staff of the institute and RIE (Bhopal), representatives from industry and sector skill councils and students of Demonstration Multipurpose School and RIE (Bhopal) were present on the occasion.

A video film on the activities organised by the PSSCIVE as UNEVOC Network Centre in India was shown to the audience. It included the role played by the centre in fostering international collaborations, partnerships, and cooperation among TVET practitioners, civil society, local communities, researchers, policy-makers, and organisation of the training programmes for TVET practitioners. It also showcased the participation of the faculty in UNEVOC electronic forum (e-forum) for exchange of information on various aspects of TVET.

A young entrepreneur Anubhav Dubey, who started a food start-up in the name of '*Chai Sutta Bar*' at the age of 22 shared his experiences as a young entrepreneur. He informed that the '*Chai Sutta Bar*' is a chain of tea and coffee with foremost priority to serve authentic and superior quality tea and at very affordable prices. The tea or coffee is served in clay cups for promoting green consumerism.

A debate competition on the topic 'Vocational Education should be made compulsory in schools' was organised on the occasion. The vocational students of Demonstration Multipurpose School, Bhopal, participated in the competition. Skill based games were organised for the faculty and staff members of PSSCIVE, Bhopal in the afternoon session.

Hindi Pakhwada

Hindi Pakhwada was organised at PSSCIVE, Bhopal from 14 to 28 September 2018. Essay, translation, noting, and drafting competitions were organised



during the *Hindi Pakhwada*. The participants of the academic and administrative section of the institute participated in the said competitions. Certificates and prize money were given to the winners.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

National Seminar on Innovative Practices in Teaching Social Science at the Secondary Level

The national seminar was organised with the objectives to share innovative teaching practices in social science at the secondary level. Thirty-five research papers were presented in the seminar. Elaborate discussions were made with regard to the methodology of teaching social science at the school level. The broad themes, such as—challenges and issues in teaching social sciences at secondary level, current trends in teaching social sciences, innovative teaching learning practices, teaching history through different source materials, IT technology in geography classroom: success stories, use of different (print and mass) media in the transaction of political science curriculum, use of statistics for teaching economics, and effectiveness of video lessons on learning outcomes of social science. Further, a panel discussion on teaching of social science in continuum in the era of science and technology was held.

National Science Day

As part of the celebration of the National Science Day, different activities like Science Quiz for the students of schools and colleges of Mysuru on 26 February 2019 and 21 February 2019, talk by K. Srinivasan *Professor*, on ‘Science for the People and the people for science’, paper presentations, and a science exhibition was conducted at RIE, Mysuru on 28 February, 2019. Undergraduate science students of Mysuru colleges, students of RIE, Mysuru and the staff and students of DMS participated in the programmes.

Extension Lecture Series

The extension lecture series provide a special forum for both the students and faculty for an academic discussion with scholars in different areas of knowledge, promote a healthy debate and interaction on various areas of contemporary concerns and interests and generate interest and enthusiasm among the students and faculty about the various fields of knowledge.

During the year 2018–19 the following lectures were organised:

S. No.	Resource Person	Topic	Venue and Date
1.	M. N. Talwar, <i>Professor</i> Kuvempu Institute of Kannada Studies, Mysuru	Ambedkar’s thoughts on education and society	A.V. Hall, RIE, Mysuru 14 April, 2018
2.	CNR Rao, <i>Professor</i> CSIR Centre for Excellence in Chemistry Jawaharlal Nehru Central Advanced Scientific Research, Bengaluru	56th Foundation Day Celebration ‘Sardai Panikkar Memorial Lecture’	A.V. Hall, RIE, Mysuru 1 August, 2018



3.	Rajeev Taranath, <i>Professor</i> Mysore Manjunath, S. N. Sethuram Rajeev Taranath Retd. Professor Faculty of RIE, Mysuru.	Significance of performing arts in education for all round development	A.V. Hall, RIE, Mysuru 1 September, 2018
4.	Raghunandan, Indian Institute of Science Bengaluru	Teaching and learning in changing world	A.V. Hall, RIE, Mysuru 5 October, 2018
5.	Chethan Ram R. A., <i>Dean and Managing</i> <i>Trustee</i> Parivarthana School, Srirangapatna	Stress management among students	A.V. Hall, RIE, Mysuru 10 October, 2018
6.	Professor M. S. Talawar, <i>Chairperson Dos (Retd.)</i> Bangalore University	Contemporary challenges in school education	A.V. Hall, RIE, Mysuru 11 November, 2018
7.	A. R. Seetharam <i>Former Principal</i> , RIE, Mysuru	Youth potential resource for national development	A.V. Hall, RIE, Mysuru 11 January, 2019
8.	Dharani Devi Malagatti, IAS	Importance of Matrubhasha	A.V. Hall, RIE, Mysuru 21 February, 2019

Pre-internship Conference for Co-operating School Teachers of JNVs and Orientation Programme for Co-operating school Heads for SAP

The programme was conducted at RIE, Mysuru from 28 June to 30 June 2018 with the objectives to share internship practices with Vice Principals of JNV and the subject teachers of – Physical Science, Biological Science, Mathematics, Social Science, and English, across the Hyderabad region, covering Karnataka, Andhra Pradesh, and Telangana State, and lecturers of Mysuru dealing with Physics, Chemistry, and Mathematics at Government Pre-University College regarding pedagogical approach, 5E model of lesson planning and writing of reflective diary, observation profile and evaluation profile adopted for internship purposes, to negotiate with the cooperating school teachers and principals about their roles and responsibilities during internships and to discuss with the cooperating school heads and teachers with regard to organisation of School Attachment Programme (SAP) with its objectives and task to be carried out during the programme.

Early Childhood Education (ECE) Programme, DM School, RIE, Mysuru

Early Childhood Education programme is running in the institute to create an interactive environment in which the children can actively engage in developmentally appropriate learning activities that can facilitate the development of cognitive, language, physical, socio-emotional, creative, and aesthetic skills and abilities that are required for the next stage. Fifty children between the age group of three to six years were studying in the ECE Centre.

Popularisation of Science through Biodiversity Park

A fully developed biodiversity park is in place at RIE, Mysuru that facilitates hands-on experiences to children, teachers, and teacher educators about science concepts and basic principles of science. The teachers demonstrate the application of scientific principles in day-to-day life through interactive models



and exhibits to the visitors. The park helps create awareness about medicinal plants, aromatic plants, rare and endangered species, and importance of the protection of herbal plant species. Also, four manuals of Biodiversity Park have been prepared which depict the common names, scientific names, parts of plant used for particular diseases, and general health.

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM, (MEGHALAYA)

Celebration of World Environment Day

On the occasion of World Environment Day on the 5 June, 2018, activities like plantation drive in the campus, poster painting competition among students, student's rally about awareness of environment and showing of documentary on plastic pollution were organised.

Celebration of Swachhta Abhiyan

The institute celebrated *Swachhta Abhiyan* on 15 September 2018. On the occasion, speech and poster making competitions for the B.Ed. students of the institute were conducted on the topics 'Innovative ideas to make the India clean' and 'My dream Bharat'. On the occasion, all the students and the faculty members took pledge on *Swachhta* which included promise to work for 100 hours per year for *Swachhta* and motivate 100 more people to take the pledge. The faculty members and the students also cleaned the campus.

Celebration of the 125th Year of Swami Vivekananda's Famous Speeches at World Parliament of Religion at Chicago 1893

As part of the celebration, the events, essay writing and speech competition was organised in the institute on 11 September 2018. The topic for essay and speech were 'You are the creator of your own destiny and the very essence of education is concentration of mind' and speech by students for five minutes on any of the Vivekananda's speeches at Chicago, 1893 respectively. Four students from the schools, K.V. NEPA, K.V. Umroi, MeECL, Christ Senior Secondary School, Bethany School, St. Francis De Assisi School, Krumdeingdei Secondary School, Pine Brook Sec. School were invited to participate in the competition.

Celebration of 150th Birth Anniversary of Mahatma Gandhi at NERIE, Umiam

The institute celebrated the 150th birth anniversary of Mahatma Gandhi from 28 September, 2018 to 2 October, 2018 with the activities like poster-cum-slogan and debate competitions on the topic 'Gandhian philosophy of education, its relevant in today's context'. On 2nd October, 2018, the celebration started with paying tribute to Mahatma Gandhi and Lal Bahadur Shastri by all the faculty members, staff, and students of the institute. A cleaning drive in and around NERIE campus was conducted. A talk was delivered by Hemashree Sharma from NEIGHRIMS on 'Need and importance of health and hygiene among students, teachers, and community members'. Community members from Nongsder and Umiam village were also invited.

National Conference on Achieving Sustainable Development Goals 2030: Education as a Catalyst

The national conference was conducted at NERIE, Umiam on 15–16 November 2018. The objectives of the conference were to deliberate upon the role of



education as a catalyst in achieving SDG 2030, to deliberate upon the different approaches and strategies in ensuring inclusive and equitable quality education and promote lifelong learning for all, to share different issues, concerns, and challenges in achieving the sustainable development goals 2030 and the role of education in addressing these and to document the innovative ideas and educational interventions in order to help achieve the sustainable development goals 2030.

Eighty presenters from different parts of the country participated in the conference on the themes: ensuring inclusive, equitable quality education and lifelong learning for all (Goal 4), role of education in socio-economic development (Goals 1,2,3,6,8,9), ensuring equality and justice for all through education (Goals 5,8,10,11,16), education and sustainable management of environmental resources (Goals 7,12,13,14,15), role of education in promoting global partnerships (Goal 17), role of education: conserving cultural heritages, indigenous knowledge systems and sustainable development, learning from around the world and best practices for sustainable development and challenges and preparedness: Where we stand in achieving the sustainable development goal 2030?

Kartikeya Sarabhai, *Director*, Centre for Environment Education, Ahmedabad was the Chief Guest, and *Director*, NESAC, Umiam was the Guest of Honor, and in the valedictory function H.K. Senapaty, *Director*, NCERT was the Hon'ble Chief Guest and Jemino Mawthoh, *Associate Professor*, NEHU, Shillong made the keynote address.

Rashtriya Ekta Diwas

Rashtriya Ekta Diwas, commemoration of the birth anniversary of Sardar Vallabhbhai Patel, was conducted on 31 October, 2018 at NERIE, Umiam. As part of the celebration, a run for unity, a short documentary film show, speeches, and literary competitions were conducted.





7. Major Schemes of MHRD Co-ordinated by the 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 and projects that are related to school and teacher education approved by Programme Approval Boards (PABs) of MHRD. Different Constituents of NCERT are assigned the responsibilities to implement the scheme effectively. During the year 2018–19, the Council conducted the following activities/programmes under various schemes.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

National Repository of Open Educational Resources (NROER)

NROER has been designed for dissemination of digital contents among the entire stakeholders free of cost. NROER, a one of its kind of project in the country pursues the dream to be the one-stop-place for the teaching-learning community. Till March 2019, a total of 13812 files including 401 collections, 2779 documents, 651 interactive, 1664 audios, 2586 images and 6133 videos have been uploaded. NCERT has conducted 19 capacity building programmes on NROER (covering 1096 MRPs and KRPs in 36 States and UTs) for teachers and teacher educators and a core group in states and UTs have been created. State and UTs are being motivated to contribute resources on NROER and create OERs for their own State and UT. This year, KRPs and MRPs of Telangana and Karnataka states have been oriented separately to create OER platform, e-Content development and creation of metadata. New section on teachers, interest groups, schools and partner have been created on NROER (<http://nroer.gov.in/chetana>). Among the many contributors and partners of NROER are Vigyan Prasar, CCRT, Gandhi Smriti and Darshan Samiti, SCERTs, SIETs, Azim Premji University, IT for Change, Amaze Infotainment Pvt. Ltd., Directorate of Adult Education, Vidya Online, Eklavya, Arvind Gupta toys, etc.

e-Pathshala

A web portal (<http://epathshala.nic.in/>, <http://epathshala.gov.in/>) and mobile apps (Android, iOS and Windows) has been designed and deployed. The portal has 1666 audios, 1789 videos, 698 e-books (e-Pubs) and 504 flip books. It has 4,23,90,198 visitors; 2,62,48,944 total YouTube views, 2.1 million app downloads and rating of 4.4 out of 5 on Google play store and 4.5 out of 5 on windows store. Nineteen capacity building programmes have been conducted



Digital India Award for best mobile app in gold category to e-Pathshala, 2019, NCERT

on e-Pathshala and on digitisation of textbooks (covering 1096 MRPs and KRPs in 36 States and UTs) for teachers and teacher educators and a core group in States and UTs have been created. The Council has provided support to the State of Haryana to digitise its textbooks and has created a mobile app i.e., 'MERI EPUSTAK' to disseminate these e-Books to all stakeholders. The States of Andhra Pradesh, Delhi, Haryana, Karnataka, Manipur, Mizoram, Telangana and Uttar Pradesh have started textbook digitisation with support from Council and have contributed for 152 e-Books on e-Pathshala. Branding of e-Pathshala — PINDICS app has been started. The app has a rating of 4.8 out of 5 on Google

Play Store. Total, 35,650 users have downloaded the app from Google Play Store. e-Pathshala has been listed and available on the UMANG app of Government of India. Mobile app 'PARAKH' has been started to automate the process of data collection for evaluation of implementation of ICT@Schools Scheme in the country. The app has a rating of 4.0 out of 5 on Google Play Store. In all, 2,520 users have downloaded the app from Google Play Store. State Resources Group (SRG) including members of the State of Telangana, Karnataka, Andhra Pradesh, Haryana and Delhi States have been oriented for digitisation and deployment of digital books and e-contents.

The e-Pathshala app won Digital India Award under best mobile App category (gold) on 22 February, 2019. The award was conferred by the Union Minister for Law and Justice, Electronics and IT, Ravi Shankar Prasad at Stein Auditorium, India Habitat Centre, Lodhi Road, New Delhi.

SWAYAM PRABHA

The Council is committed to produce high quality educational audio-video programmes for students and teachers at school level. MHRD, Government of India has developed a learning plan for utilisation of satellite communication technologies for transmission of educational e-Contents through 32 National Channels i.e., SWAYAM PRABHA DTH-TV network. NCERT is the national coordinator for one DTH TV channel i.e., *Kishore Manch* (#31) and has started feeding a 24×7 slot. Every day, four hour fresh slot has been provided which is repeated five times in 24 hours to offer learning opportunities for the stakeholders. From September 2018, six hours slot is been prepared which gets repeated three times to make it 24×7 Channel. Programmes are also telecast through National Channel (DD-I). These programmes are available through sales mechanism in CD and DVD formats.

In the year, 312 days (156 hours) of live transmission on every working day covered various topics related to school and teacher education. Apart from daily live telecast, a live interactive programme have also been initiated to help the students, parents and teachers during examinations, especially for board students in collaboration with Department of Educational Psychology and Foundations of Education (DEPFE), NCERT. This programme was titled



as 'Guidance for Students: Exam helpline' and transmitted w.e.f. 20 February, 2019 to 3 April, 2019. The e-Pathshala *Kishore Manch* App for watching *Kishore Manch* has been downloaded by 3,370 viewers. As per Jio TV App viewership, 2,06,421 users have spent 1977 hours watching *Kishore Manch*.



Helpline conducted during the board examination

MOOCs

Massive Open Online Courses (MOOCs) platform popularly known as SWAYAM i.e., Study Webs of Active learning for Young Aspiring Minds (<https://swayam.gov.in/>) along with 32 SWAYAM Prabha DTH Channels and National Academic Depository was launched by the former President of India, Pranab Mukherji on 9 July, 2017 at Vigyan Bhawan, New Delhi. The portal offers various online courses for school education and higher education. NCERT has started development of course modules for MOOCs for school education system in 12 subject areas (accountancy, business studies, biology, chemistry, economics, history, geography, mathematics, physics, political science, psychology and Sociology) for the Classes IX–XII. Modules of Physics courses have been updated. Two cycles of courses have been completed. Cycle 1 — 34,727 learners were enrolled in 23 courses and in Cycle 2 — 2733 learners were enrolled in 14 courses. The courses include: twenty courses for the Class XI and XII, one course for M.Ed. and M.A. (Education) and two courses for teachers (Urdu and Action research).

ICT Award

'National Awards for Teachers for Using ICT for Innovations in Education' is a component of 'Information and Communication Technology in Schools (ICT in Schools)' of the Central Scheme of Ministry of Human Resource Development (MHRD). The award proposes to felicitate those teachers 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. Until 2016, 87 ICT awards were instituted by Government of India for different States and UTs and seven autonomous bodies and organisations under MHRD. The awards are being awarded since 2010. For 2017, total 103 nominations from 24 States, UTs and Autonomous bodies were received. A jury meeting was held in April, 2018 in which 43 Teachers were selected by Jury for National ICT award for 2017. A two minute video of each awardee has been recorded reflecting a brief introduction about each awardee and their life. Workshop with awardees has been conducted to orient them on ICT in Education initiatives. Each awardee teacher gets an ICT Kit, a laptop and a commendation certificate. The awardees are encouraged to function as mentors (resource persons) in their respective area to motivate and train other teachers. All the awardees are expected to form a community of resource persons through networking. Selected initiatives are shared as best practices across the country.



All India Children's Educational Audio Video Festival (AICEAVF) and ICT Mela

AICEAVF is one of the major children's educational audio-video programme festivals in India, which is organised every year. ICT Mela is held concurrently to showcase the innovations in use of ICT in education.

The 23rd AICEAVF and 3rd ICT Mela were held from 27 to 29 November, 2018 at CIET, NCERT, New Delhi. The Festival and Mela got underway from November, 2018 after the inauguration by Hrushikesh Senapaty, Director, NCERT. A total



Valedictory session of 22nd AICEAVE and 2nd ICT Mela

of 196 entries (Audio- 42, Video - 106 and New Media/ICT - 48) were received under the categories of pre-primary and primary, upper primary, secondary, senior secondary, teachers and special category. These programmes were evaluated by a special jury of 12 experts who selected the best programmes under various categories and also selected individuals for their excellence in making these programmes.

Over the three days, in 19 parallel sessions, playback and preview of some of these programmes were held under the moderation of a chairperson and a convenor. After screening and playback, a detailed discussion with the producers and directors was held. Students, teachers, teacher educators from local schools and teacher training colleges also visited



Interaction with jury members during 23rd AICEAVF November 2018 at NCERT, New Delhi

during the festival. Besides, every day in the afternoon a plenary session was organised. On the first two days, panel discussions on the topics 'Technology and Learning: A Road Ahead' and 'Media for Education: Issues and Challenges' were held. On the third day, an interaction with Jury members was held in which the members of jury interacted with the audience and provided feedback.

In the ICT Mela, there were 40 stalls where various innovations in ICTs in education were showcased by different Governmental, Non-Governmental Organisations and private agencies. Broad areas covered under *Mela* were— pedagogy integration in various subjects, teacher and student assessment,



platform, mobile app, virtual lab, Augmented Reality (AR), Artificial Intelligence (AI), gaming, robotics, simulation and assistive technology and cyber safety and security. The mela covered eight states and UTs viz; Chhattisgarh, Delhi, Haryana, Karnataka, Maharashtra, Rajasthan, Tamil Nadu and Uttar Pradesh. Nine institutions as well as many individuals visited the *mela*. The total footfall was around 1,000. In the valedictory session trophies, certificate and cash prizes were given to the winners of festival and appreciation to the exhibitors of ICT Mela. In total, 47 awards were distributed in the festival.

DEPARTMENT OF CURRICULUM STUDIES

Adult Literacy—Primer

On the direction of the MHRD, under the upcoming scheme ‘*Padhnaalikhna Abhiyan*’, Department of Curriculum Studies coordinated the discussion on adult literacy primer, national curriculum framework for adult literacy, etc., in collaboration with the Department of Elementary Education. The objectives were to promote adult literacy in the country adopting innovative methodology of school students supporting adults for literacy. Under the activity, the definition of adult literacy in India, learning outcomes for adult literacy, four volumes of adult literacy primer and volunteer’s guidelines were developed.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Guidelines for Mentoring of Schools by Higher Education Institutes (HEIs) under Rashtriya Avishkar Abhiyan

Mentoring of schools by Higher Education Institutes (HEIs) and graduate students is a key feature of *Rashtriya Avishkar Abhiyan* (RAA). Guidelines for mentoring of schools by Higher Education Institutes (HEIs) under *Rashtriya Avishkar Abhiyan* have been developed by DESM, NCERT in consultation with the Rashtriya Avishkar Abhiyan (RAA) Higher Education Institutes (HEI) Nodal Officers, faculty from Higher Education Institutes and experts from schools. The guidelines incorporate the appropriate activities in science to be undertaken by faculty and students of different departments (physics, chemistry, zoology, botany, computer science, etc.) of HEIs for mentoring of schools.

Rashtriya Avishkar Saptah 2018

Last week of October, i.e., October 29 to November 02, 2018 (October being the month of A.P.J. Abdul Kalam’s birth anniversary) was declared as ‘*Rashtriya Aavishkar Saptah 2018*’. During the week, all students at secondary and higher secondary stages, one school of each block across the nation, were expected to uniformly carry out a study as per the guidelines provided by NCERT. The topic for the proposed study was ‘Testing water quality’.

Two days national consultative meeting with MHRD officials, senior functionaries of States and UTs, RIEs and RAA Nodal Officers was conducted at NIE, New Delhi on 4–5 October 2018 in which implementation of the programme was discussed and the guidelines of *Rashtriya Aavishkar Saptah*, 2018 was finalised. The guidelines were shared with all States and UTs for implementation and were also made available on NCERT website. Provision



was made for online collection of data and results of the study conducted by schools. A total of 1209 schools submitted the results of the study which have been analysed and are being shared with States and UTs.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

Kala Utsav

Kala Utsav is a national level event being held annually since 2015 which is an initiative to promote arts in education by nurturing and showcasing the artistic talent of students at the secondary and higher secondary stage (Classes IX–XII) of education in the country. This is an event to celebrate living traditions of art forms. The objectives of the programme were to encourage and showcase the artistic talents of secondary school students focusing on both performing and visual arts and crafts (dance, music, theatre, painting, sculpture and heritage crafts), and to enhance awareness of India's cultural heritage and its vibrant diversity amongst students. The best teams come for participation at the national level after being held at school, District and State levels.

The Kala Utsav, 2018 was celebrated at *National Bal Bhavan (NBB)*, New Delhi from 12 to 15 December, 2018. Two hundred and eighty-one students from 34 States and UTs and KVS and NVS participated in the programme.



Students performing during Kala Utsav 2018

Winners of Kala Utsav 2018

Art Form and Category	First	Second	Third
Painting (Girls)	Khushboo Sharma, Delhi	Bhuneshwari, Chhattisgarh	Neelakshi Sachin Pawar, Maharashtra
Painting (Boys)	Puneet Kadvane, Madhya Pradesh	Vikash, Delhi	Alok Omprakash Gupta, Mumbai, Maharashtra
Dance (Girls)	Margam Vyshnavi, Telangana	Jasnya K. Jayadeesh, Kerala	K. Shamavani, Delhi
Dance (Boys)	Dharani Balan K, Tamil Nadu	Suryakanta Pradhan, Odisha	Kapil Singh, Haryana
Vocal Music (Girls)	Harsimranjot Kaur, Chandigarh	Sae Vishnoo Vaze, Goa	Khushi Shubh Kumari, Himachal Pradesh

Vocal Music (Boys)	Anirudhh Shankar, Tamil Nadu	Ritik Gupta, Delhi	C. Vanlalnunzira, Mizoram
Instrumental Music (Girls)	Jasleen Kaur, Punjab	Aditi Popat Satpute, Maharashtra	Siya Pota, Delhi
Instrumental Music (Boys)	Ujith Uday Kumar, Delhi	Akhil Bhaskar Kerala	Ajay Kumar, Haryana

EDUCATIONAL SURVEY DIVISION

Implementation of National Talent Search Scheme

The National Talent Search Scheme is a flagship programme of the NCERT. It is being conducted since 1963. The purpose of the scheme is to identify and nurture students selected through two-tier process every year. The NTSS helps talented students by providing financial assistance in the form of monthly scholarship and also conducts nurturance programmes for them. There is 15 per cent reservation for SC and 7.5 per cent for ST candidates. Besides, there is three per cent reservation for children with special needs, which cuts across the caste categories. In the Table 1 total number of awardees on rolls during 2017–2018 are given.

**Table 1: Total Number of NTS Awardees on the Roll
During the Year 2017–2018**

S.No	Course and Class	No. of NTS Awardees
1	Class XI	1000
2	Class XII	922
	Total (A)	1922
Undergraduate		
3	Diploma Course	05
4	Basic Science (B.Sc./B.Pharm/B.S.M.S./B.D.S.)	47
5	Social Science (B.A./B.B.A.)	13
6	Preparatory Course (B.E./B.Tech)	2308
7	M.B.B.S.	276
8	L.L.B. (Integ. Law Course)	16
	Total (B)	2665
Postgraduate		
9	Basic Science (M.Pharm)	NIL
10	Social Science	04
11	M.E./M. Tech	32
12	M.D./M.S.	NIL
13	Management	22
	Total (C)	58
	Grand total (A+B+C)	4645



Nurturance Programme for the NTSE Scholars

National Talent Search (NTS) is a flagship programme of NCERT for the identification and nurturance of talented students at school stage. The awardees are nurtured so that they ultimately turn out to be specialists in their areas of choice. The nurturance programmes for all the awardees were conducted in the reputed institutions such as IITs, HBCSC, RIEs, Universities, etc. In each programme NTS awardees from nearby region and States will be invited for interaction for a five-day programme. List of programme conducted during 2018–19 are listed below:

Nurturance Programme conducted during 2018–19

S. No.	Venue	Date
1.	RIE, Mysuru	11–15 February, 2019
2.	Computer Science and Engineering, UIET, Sec-25, Punjab University Chandigarh -160014.	18–22 February, 2019
3.	IIT, Delhi	11–15 March, 2019
4.	RIE, Ajmer	11–15 March, 2019
5.	Homi Bhabha Center for Science Education (HBCSE) of TIFR, Mumbai	25–29 March, 2019

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

National Population Education project (NPEP) and Adolescence Education Programme (AEP)

The National Population Education Project (NPEP) was launched in 1980 and is housed in the department as an independent cell to promote population education and adolescence education in schools and teacher education institutions in India. It aims to:

- ❑ Develop awareness and positive attitude towards issues associated with population, development leading to responsible behaviour among students and teachers and indirectly among parents and the community at large;
- ❑ Sensitise learners about Adolescent Reproductive and Sexual Health (ARSH) concerns, inculcate positive attitude and developing appropriate life skills for responsible behaviour.
- ❑ Recently NPEP has developed Curriculum on Health and Wellness of School Going Children, under the aegis of School Health Programme of Ayushman Bharat. This programme is a collaborative initiative of Ministry of Human Resource Development and Ministry of Health and Family Welfare. Through this programme, the Council tries to address the needs and concerns of children through age appropriate scientific knowledge and empower them with needed life skills to enable them to face real life challenges and to take informed decisions with responsible behaviour.
- ❑ The NPEP and AEP Cell envisaged to develop materials including e-learning materials and to conduct capacity building programmes for teachers, educational administrators on population education, adolescence education, life skills and health and wellness; integrate these concerns in syllabi and



textbooks, and strengthen the monitoring mechanisms to implement life skill based experiential learning activities in schools.

Curriculum on Health and Wellness of School going Children

NCERT has developed curriculum on health and wellness of school going children for School Health Programme (SHP) under *Ayushman Bharat* to foster the growth, development and educational achievement of school going childrens by promoting their health and wellness. The curriculum have eleven themes namely—growing up healthy; emotional well-being and mental health; interpersonal relationships; values and citizenship; gender equality; nutrition, health and sanitation; prevention and management of substance misuse; promotion of healthy lifestyle; reproductive health and HIV prevention; safety and security against violence and injuries; and promotion of safe use of internet and social media behaviour. The objective of this initiative is to provide comprehensive knowledge, psychological support and services to school going children related to health and well-being.

Capacity Building Programme for Teachers from Central Tibetan Schools Administration (CTSA)

Two capacity building programmes were organised by the National Population Education Project Cell that focused on issues related to population education and adolescence education. The training programmes were held for 11 days from 2–12 July, 2018 at Conference Hall of DESS, Third Floor, Janaki Ammal Khand and Room no. 202, CIET, NCERT. One programme was for Primary Teachers, Work Education Teachers and Music Teachers and the other training for PGTs and TGTs. The topics related to adolescence education, population and sustainable development, growing up, substance abuse and HIV and AIDS, issues concerning on contemporary issues in life skill education, history, use of ICT for school education, innovative teaching learning methods in social sciences at upper primary and secondary stages were covered in the 11 day programme. The interactions in the training programmes provided opportunities of acquiring needed skills for organising experiential learning activities in school, hands on experience related to teaching learning processes.

Capacity Building Programme for National Resource Persons from States, UTs and RIEs on Research Methodology

One five day capacity building programmes were organised by the National Population Education Project Cell that focused on research methodology in population education and adolescence education. The capacity building programme was held for 05 days from 9–13 July, 2018 at Room no. 229, CIET, NCERT. Sessions related to identification of research areas and concerns, literature review, conceptual framework, formation of objectives, hypothesis and research questions, tools; questionnaires, tryout, sampling techniques, statistical methods for data analysis including SPSS, report writing, etc., were covered in the 5 day capacity building programme. The interactions in the capacity building programme provided opportunities of acquiring needed skills for organising research activities in schools, hands on experience related to different aspects of educational research processes.



Sl. No.	Title of the Programme	Dates
1	Capacity building programme for Primary Teachers, Work Education Teachers and Music Teachers from Central Tibetan Schools Administration (CTSA)	2–12 July, 2018
2	Capacity building programme for PGTs and TGTs from Central Tibetan Schools Administration (CTSA)	2–12 July, 2018
3	Capacity building programme for National Resource Persons from States, UTs and RIEs on research methodology.	9–13 July, 2018

National Role Play Competition

The National Role Play Competition was organised for Class IX students of government schools of States and UTs. In the Role Play Competition, four major themes having seven citations were included (Healthy Relationships



Role Play National level competition held at NCERT, New Delhi

among Adolescents, Charms and Challenges of Adolescence, HIV and AIDS: Stigmatisation and Cause and Consequences of Drug Abuse). The number of participants in each situation was between 4 and 5 and duration of the role play was 5 to 7 minutes. The languages of the role play were Hindi and English. The competition was held at school, block, district, State at States, UTs levels and national level. The national level competition was organised by NPEP at NIE, New Delhi from 4 to 7 December, 2018. Twenty six students from government schools of 26 States and Union Territories and four RIEs of NCERT participated at national level role play competition. At the district and State levels, students from 2018 schools located in 355 districts participated in the event.

National Folk Dance Competition

Indian folk dances are popular medium to express joy and fantasies. However, these have equal potential to develop life skills, apart from developing



basic skills such as, agility, balance, coordination, strength, and endurance among the participants as well as the audiences. The national level competitions of role play and folk dance were organised by the NCERT for States and UTs at NIE, New Delhi from 4 to 7 December 2018. Three hundred and thirty three districts and RIEs of NCERT participated in the folk dance competition.



Folk Dance National level competition held at NCERT, New Delhi

Interactive workshop with SCERTS and SIES for Implementation of National Action Plan for Drug Demand Reduction

National Council of Educational Research and Training jointly organised a two day Interactive workshop with National Institute of Social Defence (NISD) on 3–4 January, 2019 at Room No. 202, CIET, NCERT, Sri Aurobindo Marg, New Delhi on the role of SCERTs and State Institutes of Education (SIEs) for conducting various programmes in schools for drug Demand Reduction and to get suggestions to roll out capacity building and awareness programmes for school teachers and students/adolescents in different States and UTs under National Action Plan for Drug Demand Reduction (NAPDDR).



Participants engaged in the workshop on Drug Demand Reduction

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Mechatronics Laboratory Curriculum on Mechatronics

Development of Mechatronics Laboratory Curriculum on Mechatronics has been designed in collaboration with Korean team and the corresponding laboratory on Mechatronics has been proposed to establish in DMS, Bhopal in coming session.

Pre-vocational Course and Course on Beauty and Wellness

The curriculum and course-ware for upper primary stage on pre-vocational education have been developed in collaboration with Korea. In the same



time curriculum has also be designed on Beauty and Wellness along with a development of related laboratory in DMS, Bhopal in collaboration with Korean team. This course is proposed to be launched there from coming session.

Teacher Professional Development Curtin University Programme in Collaboration with Australia

RIE, Bhopal works with Curtin University, Perth, Australia in the field of STEM Education and also conducted a five-day training programme on teacher professional development programme through Moodle from 3 to 5 February 2019.

PANDIT SUNDARLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

Curriculum and Courseware under NSQF for Vocationalisation of School Education.

The MHRD has mandated NCERT for the development of curricula and courseware of NSQF courses. It is mandatory for all States to follow the curricula and courseware developed by the PSSCIVE, Bhopal. Hence, the institute developed and published learning outcome based curricula, student workbooks, teachers' handbooks for vocational courses under NSQF under PAB. During the year 2018–19, the following curriculum and courseware have been developed for vocationalisation of school education under *Samagra Shiksha*.

S. No.	Sector	Job Role	Class	Status
1.	Soft Skills	Employability Skills	IX	Published
			X	Under Publication
			XI	Published
			XII	Under Publication
2.	Agriculture	Animal Health Worker	IX	Published
			X	Under Publication
		Solanaceous Crop Cultivator	IX	Published
			X	Under Publication
3.	Agriculture	Dairy Farmer/Entrepreneur	XI	Published
			XII	Under Publication
		Floriculturist (Open Cultivation)	XI	Published
			XII	Under Publication
		Floriculturist (Protected Cultivation)	XI	Published
			XII	Under Publication
4.	Retail	Cashier	IX	Published
			X	Under Publication
		Store Operations Assistant	IX	Published
			X	Under Publication
5.	Retail	Sales Associate	XI	Published
			XII	Under Publication
		Store Operations Assistant	XI	Published
			XII	Under Publication



Innovative Model of Vocational Education in 10 Schools

A meeting on the various aspects of the implementation of the project on innovative model of vocational education in schools, approved by the Project Approval Board (PAB), *Samagra Shiksha Abhiyan*, MHRD, Government of India was held on 17 September, 2018. The meeting was chaired by H.K. Senapaty, *Director*, NCERT and was attended by *Joint Director*, PSS Central Institute of Vocational Education (PSSCIVE), *Joint Director*, Central Institute of Educational Technology, faculty of National Institute of Education and PSSCIVE, State representatives from the Education Department of Madhya Pradesh, Meghalaya, Rajasthan, and Tripura, and Principals and Headmasters from Regional Institutes of Education (RIEs) of NCERT.

Hrushikesh Senapaty, *Director*, NCERT informed the participants about the revised scheme of vocationalisation of secondary and higher secondary education under the *Samagra Shiksha*. He also apprised the participants about the project. Under the project, 10 schools have been selected to set up a model of vocational education programme, which will impart training in two vocational subjects in a school, with a focus on the use of state of the art equipment and technology, linkages with the industry and institutions for training and additional learning hours for practical or skill development. He informed that the project will be implemented in four Demonstration Multipurpose Schools (DMSs) of NCERT located at Ajmer, Bhopal, Bhubaneswar and Mysuru and six schools identified by the State Education Department of Karnataka, Madhya Pradesh, Meghalaya, Odisha, Rajasthan, and Tripura.

R.P. Khambayat, *Joint Director*, PSSCIVE, Bhopal informed that the main feature of the project of model vocational education programme in 10 schools is the provision of additional 1,00,0 learning hours for Classes IX to XII to provide more opportunity for skill training.

Four Regional Consultation Meeting-cum-Workshops on Vocationalisation of Secondary and Higher Secondary Education in States and UTs of India

Four 2-day regional consultation meeting-cum-workshops on the implementation of scheme of vocationalisation of secondary and higher secondary education in India were organised at PSSCIVE, Bhopal for the four regions on 6–7 December, 2018; 23–24 January, 2019; 4–5 February, 2019 and 11–12 February, 2019. The objective of the workshop was to review the current status, policies and practices of vocational education in schools of all the four regions of the country and make recommendations for addressing the various issues faced by the States and UTs of these regions in effective implementation of vocational education. Over 120 representatives from National Skill Development Corporation, Sector Skill Councils, Department of School Education, State Council of Educational Research and Training, State Examination Boards and faculty and consultants from PSSCIVE, Bhopal attended the workshops.

During these programmes the participants were acquainted with the initiatives taken by the institute, such as publication of vocational curriculum for 100 job roles and student textbooks, innovative model vocational education in 10 schools and Diploma in Vocational Education and Training. They were informed that for the first time green skills have been introduced in



the employability skills module to promote sustainable development in the country. During the workshops, presentations were made on various aspects of implementation of vocational education in schools. Challenges being faced by the states and good practices being followed by the States and several queries with respect to exchange of information and data between the States and NSDC or MHRD were addressed during the meeting.





8. Visitors to the NCERT and Foreign Visits by the NCERT Faculty

The 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 visited the Council 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; 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 information, ideas and innovative thoughts while interacting with the faculty members of NCERT that in turn helps to renovate the school and teacher education system. The NCERT faculty visited countries and foreign institutions which acquainted them with the system of school education and best practices in countries and helped them explore the possibilities of bi-lateral cooperation.

The International Relations Division co-ordinates the visit of foreign delegates and Public Relations Unit of NCERT coordinate the visit of persons from national organisations and institutions.

Visits by Delegations and Experts from Various Countries

- ❑ A five-member delegation on behalf of the Korean Research Institute of Vocational Education and Training (KRIVET) visited NCERT from 14 to 24 August, 2018. During the period they visited PSSCIVE, Bhopal to carry forward the Korea-India Vocational Education Cooperation Programme. The final round-up meeting was held at NIE, New Delhi on 24 August 2018.
- ❑ A five-member technical research team led by Kim Young-Gil of KOICA visited NCERT (NIE, New Delhi and RIE, Bhopal) from 28 January to 1 February, 2019 in order to make a detailed assessment of the project to establish a model vocational education wing in the DMS, Bhopal with South Korea's assistance.
- ❑ A five-member delegation comprising of Kinga Dakpa, Amber Rai, Wangchuk Rabten, Norbu Wangchuk and Bhog Raj Rai from the Royal Education Council came on an institutional visit to NCERT from 7 to 11 May, 2018. The objective of the visit was to make them familiar with the structure and functioning of NCERT as an institution and to explore possibilities of

mutual academic collaboration by way of signing an MoU. The delegation visited DCS, DEE, DESM, DESS, DEL, ESD and CIET. A broad outline of the proposed MoU was also worked out during this period.

- ❑ A five-member delegation from the Ministry of Foreign Affairs, Republic of Korea accompanied by So-Yeon Park, *Counsellor* in the Embassy of the Republic of Korea in New Delhi visited NCERT on 24 May, 2018. They had a meeting with the *Director*, NCERT and Head, IRD along with other faculty members of NIE, PSSCIVE and RIE, Bhopal to prepare a roadmap for the on-going collaboration between NCERT and KRIVET, Korea in the field of vocational education.



Korean delegates interacting with Professor Hrushikesh Senapaty, Director, NCERT

- ❑ Louise McSorley (*Academic Counselor* to the Australian High Commission) and Anu Jain (*Senior Advisor, Academic*) visited NCERT on 24 July, 2018 in order to understand the collaborative works envisaged to be undertaken through various provisions of the MoU signed between NCERT and Curtin University and extend diplomatic assistance wherever necessary.
- ❑ Rekha Koul and her associate from Curtin University, Australia visited New Delhi after completion of their STEM training programme conducted in RIE, Bhopal on 12 February, 2019. As desired by the *Director*, NCERT, they had a meeting with Head, IRD as well as CSD and discussed about the future cooperation under the signed MoU between the two institutions in July 2018.
- ❑ An interaction meeting with Bhutan's delegations was held on how Department of Elementary Educations works on teaching learning process at elementary stage on 8 May, 2018.
- ❑ As per discussions of the team from Engagement Global and ESD Expert Net from Germany and South Africa with the *Director*, NCERT and his team with regard to undertaking academic activities to promote Education for Sustainable Development, a pilot programme, a training programme on Trainers Modules on Education for Sustainable Development (ESD) was conducted at NIE, Delhi from 8 to 12 October, 2018 in collaboration with the Engagement Global and ESD Expert Net. Around 50 participants including faculty members from NCERT and teachers, teacher educators, curriculum developers from the States and UTs participated in the programme.
- ❑ An international study tour for capacity building of programme officers of the national education commission, Sri Lanka was organised from 26 to 30 November, 2018 at PSSCIVE, Bhopal. Six programme officers and



policy research officers from national education commission of Sri Lanka participated in the programme. R.J. Rao, *Vice Chancellor*, Barkatullah University, Bhopal inaugurated the programme and spoke about the importance of providing necessary exposure to teachers in the use and application of modern teaching methods. During the five-day technical sessions, the participants learnt about the ancient and modern education system in India, including the Gurukul system of education in which anyone (student or *shishya*) who wish to study goes to the teacher's (*guru*) house and would stay there to learn Sanskrit and other subjects, besides doing home-based activities. The participants learnt about the modern education system which has been conceived as a systematic effort to promote Indian culture, values, heritage, traditional arts and crafts, customs, traditions, etc., which in turn influences the mental, social, moral and emotional aspects of the individuals or learners. They also learnt about the steps taken by the government in improving health and nutrition of children through mid-day meal, improving enrolment through right to education act 2009, improving quality of education through teacher education and learning outcomes, and providing better residential facilities to girls. Skill development, which is of central importance to the Indian government and is considered as important driver of economic development was discussed in detail. Quality assurance in Vocational Education and the efforts being made by the governments in promoting Skill India Mission, *Pradhan Mantri Kaushal Vikas Yojana*, Make in India, *Swatch Bharat Abhiyan*, startup India scheme, and digital India were also discussed during the technical sessions. Other curricular thrusts included addressing the learning needs of diverse groups of learners, promoting e-learning through the use of technology, with focus on massive open online courses, *e-Pathshala* and *Swayam* (free online education), linking education with life-skills and the world of work, introduction of the concept of green skills and sustainable development and providing flexibility in teaching-learning. The delegates visited educational institutions in Bhopal including RIE, Bhopal, CRISP, NITTTR, Jagran Lake University (JLU), Government Higher Secondary School for Excellence.

- ❑ The instructors of technical training institutes of Bhutan visited PSSCIVE, Bhopal to attend the capacity building programme on curriculum development and implementation from 18 to 29 June, 2018. In his inaugural address, C. Thangaraj, *Director*, National Institute of Technical Teacher Training and Research (NITTTR), Bhopal stated that countries like South Korea and Germany have more than 90 per cent of people opting for vocational education and training and the countries have developed their infrastructure by preparing highly skilled manpower and technologically advanced machineries. He opined that there are lessons to learn from the best practices of VET in Korea and Germany.

The topics covered during the programme included Recent Trends in TVET, Role of Vocational Teachers, TVET Curriculum: Theory and Practice, Action Research, e-Content and Digital Learning Resources Development, Use of Multimedia, Design and Development of Curriculum, Curriculum Implementation, Vocational Pedagogy, ICT, Life Skills, Professional Ethics and Values, Vocational Education for Children with Special Needs, Action



Planning, Best Practices in Curriculum Development and Communication Skills. Bhutan Vocational Qualifications Framework (BVQF) and Bhutan qualifications framework were discussed during the capacity building programme.

The participants visited Centre for Research and Industrial Staff Performance (CRISP), Bhopal to learn about the various activities being carried out by the institution in industrial automation, manufacturing technology, car mechatronics, information technology, multimedia and entrepreneurship development. They also visited National institute of Technical Teacher Training and Research, Bhopal to understand the role of the institute in curriculum development, development of learning resources, educational management, continuing education, student assessment, multi-media development, and technical education research. A visit to the Eicher Tractor Assembling Plant at Raisen, Madhya Pradesh was also organised to expose the participants to the latest technology and the new skill expected by the employers. In their feedback, the participants expressed their satisfaction about the training programme and suggested that such training programmes should be organised for other TVET instructors of Bhutan.



Delegates from Iran interacting with Hrushikesh Senapaty, Director, NCERT and Amarendra Behera, Joint Director, CIET

Foreign Visits by the NCERT faculty

- ❑ A four-member team from NCERT comprising Hrushikesh Senapaty, *Director, NCERT*, Rajesh Khambayat, *Joint Director, PSSCIVE, Bhopal*, Pratyusa Kumar Mandal, *Head, International Relations Division* and M.V.S.V. Prasad, *Assistant Professor, DESS* visited the Republic of Korea from 29 May to 5 June, 2018 on the eve of the Korean President visit to India to carry forward the initiatives taken up with the Academy of Korean Studies (AKS), KRIVET and the Korean National Institute of Special Education (NISE) under the provisions of the MoU signed with AKS and firm up the prospective plan for setting up a model vocational school in NCERT with Korean assistance.
- ❑ Hrushikesh Senapaty, *Director, NCERT* and A.K. Wazalwar, *Head, DEK* visited Paro, Bhutan from 5 to 8 December, 2018. A discussion was held with the faculty of Royal Education Council on the activities of DEK.
- ❑ Amarendra P. Behera, *Joint Director, CIET* attended the Sustainable Education Meeting 2018, Reinforcing Partnership (SDGs 4 and 17) Sustainable Education and Technology— Effective Achievements, on 27 – 28 September, 2018 held at New York City, United States of America. He spoke on the topic, 'The Main Trends of Technology in Education in India'



on 28 September, 2018 under the 'India@EDU: ICT Ecosystem' session.

- ❑ Ranjana Arora, *Head*, DCS, visited Curtin University, Perth, Australia from 1 to 5 July, 2018. The objectives of the visit were to promote academic collaboration between the NCERT and Curtin University especially in the areas of teacher education, educational research and academic exchange and engagement. The outcomes of this visit includes— Mutual understanding of specific aspects of teacher education, educational research and academic exchange areas and nature of collaboration in mutually discussed areas of collaboration and for developing an action plan; Learning about best practices in pre school system and at primary and secondary stage school system in Australia; Mutual understanding on developing on-line in-service teacher professional development courses with enhanced interactivity and good feedback and evaluation mechanism as in-built components.
- ❑ Ranjana Arora, *Head*, DCS visited Royal Education Council (REC), Paro, Bhutan from 6 to 7, December 2018. REC is a national epicenter for education innovation and transformation and for designing the national school curricula and teacher professional development programmes. This aims at improving overall mainstream education system. The objectives of this visit were mutual sharing of needs and initiatives in the areas of School Curriculum, Educational Kits and ICT in Education and Finalisation of MoU between NCERT and REC for academic support. Ranjana Arora presented two papers one on 'Curriculum Development in India' and the other on 'Curriculum for 21st Century' in the workshop conducted by REC. Outcomes of this visit includes Mutual understanding of curriculum development process and ICT initiatives in school education in Bhutan and India.
- ❑ Anita Nuna, *Professor*, DCS visited Bangkok, Thailand to participate in a Regional Multi-stakeholder Dialogue on Comprehensive Sexuality Education (Regional CSE Dialogue) organised by UNESCO Bangkok, UNFPA APRO and Asian Pacific Resource and Research Centre (ARROW) from 5 to 6 September, 2018 in Bangkok, Thailand. A total of 90 government officials, representatives from regional and national civil society organisations and UN agencies from 15 countries in Asia Pacific Region participated. The objective of the dialogue was to orient participants on the latest evidence, catalyse national and regional level advocacy and identify opportunities to strengthen CSE implementation with a view to promote well-being of children and young people by enabling them to develop accurate and age appropriate knowledge, positive values, respect for human rights, gender equality and diversity, and, attitudes and skills that contribute to safe, healthy and positive relationships.
- ❑ Sandhya Singh, *Head*, DEL, Eleventh World Hindi Conference organised at Mauritius from 18 to 20 August, 2018 to promote the use of Hindi language as a medium of service and knowledge. The event was attended by large number of people who have association with Hindi and other Indian languages. There were discussions on the use of Hindi in media, films, education and areas of social interactions. There was concern about losing words and scripts of Hindi and Indian languages. It was felt that Hindi should be promoted as a language of business, marketing, insurance and banking and corporate sector.



- ❑ Saroj Bala Yadav, *Dean (Academic)* was one of the panelists in the STRIVE Preconference Meeting on AIDS 2018. This conference was held at RAI Exhibition and Convention Centre, Amsterdam, Netherland from 20 to 24 July, 2018.
- ❑ Mona Yadav, *Professor*, DGS, participated in the training workshop on Online Gender Assessment Tools for Teacher Education in Asia-Pacific organised by UNESCO Bangkok at Hanoi, Vietnam on 28–29 May, 2018. The objectives of the workshop were to introduce and demonstrate the use of the online gender assessment tools for teacher education, to train participants to navigate and use the tools effectively and to discuss and identify potential opportunities for using the online tools, including resources required. Fifty six participants from twenty-two countries participated in the workshop. Six online tools on various aspects of teacher education were shared with the participants. Discussions were held on the various items of the tools. The tools prepared by UNESCO will help in further improvement of the tools prepared by DGS and the other UNESCO tools can be utilised for gender assessment of teacher education institutes.
- ❑ Mona Yadav, *Professor*, DGS, participated in the training of trainers' workshop on Gender Mainstreaming in Teacher Education in Asia-Pacific at Shanghai, People's Republic of China from 17 to 20 July, 2018. A training manual on Gender Mainstreaming in Teacher Education in Asia-Pacific was shared by UNESCO Bangkok. The manual can be used in the capacity building programmes organised by the teacher educators on gender mainstreaming and help in identifying actions to remove gender barriers in teacher education institutions.
- ❑ Poonam Agrawal, *Professor*, DGS and Mily Roy Anand, *Professor*, DGS visited the Republic of Korea from 24 November to 1 December, 2018 under Korea Foundation funded project titled 'Policies on Education and Skill Development for Empowerment of Girls: A Comparative Study of India and Korea'. During the visit, interaction on education policies of Korea and India was held with officials from Ministry of Education (MOE), Korea. The faculty also visited Korean Women's Development Institute (KWDI) and Korea Research Institute for Vocational Education and Training (KRIVET) and held interactions. The discussions carried out and the material collected during the visit will help in analysing the relevant policies/initiatives taken by the Korean government, make comparative analysis with the Indian initiatives and make suitable recommendations towards empowerment of girls through education and skill development.
- ❑ Veer Pal Singh, *Professor*, Kirti Kapur, *Professor*, Seema. S. Ojha, *Professor* and a team of NCERT officers visited the Mauritius Examinations Syndicate, Ministry of Education and Human Resources Mauritius from 24 to 28 September, 2018 as per MOU between two countries to provide academic support. Assessment was provided to the MES in developing Assessment Framework for Primary School Achievement Certificate (PSAC), National Qualification Framework (NQF) Level I and Level II. Apart from this, Criteria for selection based on NCE, (NQF: Level II) performance to Choose different Streams (Academy/Secondary/Polytechnic) were also suggested. During the Workshop, MES circulated 'Teaching and Learning Syllabus' in



different core subjects condensed at one place for Classes VII, VIII and IX which is based on National Curriculum Framework: Nine Year Continuous Basic Education— Classes VII, VIII and IX. This document delineated four essential components required for assessment in Classes VII, VIII and IX namely— (i) Scope and Sequence of Content Areas, (ii) Expected Learning Outcomes, (iii) Content Areas and Specific Learning Outcomes, and (iv) Achievement Criteria and Levels. Based on the information delineated in the document, design and blue print for model question papers for class VII in different subject areas namely; Languages, Mathematics, Science and Social Science were developed along with scoring criteria, question-wise analysis.

- ❑ Anup Kumar Rajput, *Professor*, visited Finland from 5 to 10 Feb 2019. The visit aimed at understanding the education system of Finland. The visit included meeting and discussion with the Finnish agency for education, teacher education institute and its experimental school, institute of vocational education and some schools. The delegation included officials of Society For All Round Development (SARD) a not for profit non-governmental organisation working with various government schools to improve quality of school education along with Professor Anup Kumar Rajput. The discussion with Finnish Agency for education provided opportunity to understand the process of development of National Curriculum Framework for school education starting from a systematic pre-school to academic and vocational streams.
- ❑ Dinesh Kumar, *Head*, DESM visited Singapore from 27 to 30 January, 2019 in connection with Academic Audit of Global Indian International School at the invitation of Education Technology and Management Academy, New Delhi.
- ❑ B.P. Bhardwaj, *Professor*, DTE participated in the 19th UNESCO–APEID International Conference, ‘Effective School Leadership for the 21st Century’ from 7 to 9 November, 2018 at Thailand.
- ❑ Y. Sreekanth, *Principal*, RIE, Mysuru attended the second Asia-Pacific Expert Meeting —Implementing National Qualifications Frameworks (NQF) Level at Bangkok, Thailand on 23–24 August, 2018.
- ❑ S. Ramaa, *Professor*, RIE, Mysuru was a resource person in the workshop on Learning Disabilities Intervention Techniques in the 1st International Malaysian School Psychology Conference held at Kaula Lumpur, Malaysia from 10 to 12 January, 2019.
- ❑ Kalpana Venugopal, *Professor*, RIE, Mysuru visited University of Carolina to undertake research as part of Fulbright Nehru Academic and Professional Excellence Fellowship during October 2018 to June 2019.
- ❑ Ratnamala Arya, *Professor*, RIE, Bhopal attended 3rd Global Capacity — Building Workshop on GCED held in Republic Korea from 29 August to 11 September, 2018.
- ❑ Ratnamala Arya, *Professor*, RIE, Bhopal attended the Educational Leadership Consultant meeting in Bangkok, Thailand from 23 to 25 April, 2018.
- ❑ N.C. Ojha, *Professor*, RIE, Bhopal attended the 3rd International Conference on GCED: Platform on Pedagogy and Practices on 5–6 September, 2018 held



at Seoul, South Korea, organised by the UNESCO and Asia-Pacific Centre of Education for International Understanding (APCEIU).

- ❑ Nityananda Pradhan, *Principal*, RIE, Bhopal attended Human Resource (HR)—East Asia Pacific (EAP) Workshop: Entrepreneurship through TVET in the 4th Industrial Revolution on 8 and 9 November, 2018 at Seoul, Korea.
- ❑ Nityananda Pradhan, *Principal*, RIE, Bhopal attended Global HR Forum, 2018 on 6–7 November, 2018 at Seoul, Korea.

Visitors from Indian Institutions/Organisations to the NCERT

The following institutions, students and faculty members visited the Council during 2018–19.

- ❑ M. Ed. Student-teachers from Department of Education, M. S. University, Baroda, visited NCERT to know about structure, role, responsibility and functions of NCERT, curriculum development, teacher education, elementary education, etc., from 26 to 29 December, 2018.
- ❑ M. Ed. Student-teachers from Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi as a part of their internship programme visited NCERT from 8 October, 2018 to 2 November, 2018.

LIBRARY AND DOCUMENTATION DIVISION

A group of students, teachers and faculty members, from different educational institutions visited LDD as part of their educational tour including participants of different training programmes/refreshers courses organised by different departments of NCERT. They were sensitised about the library hours resources, services and various kinds of library membership borrowing facilities.

- ❑ A group of 33 M.Ed. students from Central University of Jammu visited LDD on 6 April, 2018.
- ❑ A group of 60 students and faculty members from SKCE, Baghpat, Uttar Pradesh visited LDD on 11 April, 2018.
- ❑ A group of B.Ed. Students of Dayalbagh Educational Institute visited LDD on 31 August, 2018.
- ❑ A group of 21 students and faculty member from Kaushalya Institute of NTE, Badarpur, Delhi visited LDD on 18 September, 2018.
- ❑ A group of 22 B.Ed. students and faculty members from School of Education, Noida International University, Greater Noida, Uttar Pradesh visited LDD on 8 October, 2018.
- ❑ A group of 5 M.Ed. students from RIE, Bhopal. visited LDD on 10 October, 2018.
- ❑ A group of 80 B.Ed. students and faculty members from Lady Irwin College, University of Delhi visited LDD on 11 October, 2018.
- ❑ A group of 7 students from Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth was oriented on 26 October, 2018.
- ❑ A group of 19 students and faculty members from M.S. University Vadodara, Gujarat visited LDD library on 29 December, 2018.
- ❑ A group of 19 students and faculty members from Lingaya's University, Faridabad, Haryana visited LDD on 31 January, 2019.



- ❑ A group of 28 students and faculty members from K.R. Mangalam University, Gurugram, Haryana visited LDD on 7 February, 2019.
- ❑ A group of 100 D.El. Ed., B.Ed. 1st year and B.Ed. IInd year students from Institute of Vocational studies visited LDD on 8, 11 and 12 March, 2019 respectively.
- ❑ A group of 46 B.Ed. students of IITE, Gandhinagar, Gujarat visited LDD on 18 March, 2019.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

CIET-NCERT oriented the visitors about various activities of CIET consisting of ICT Initiatives, ICT Curriculum, e-Content development, digitisation of textbooks, NROER, e-Pathshala, MOOCs on Swayam and DTH-TV channel Swayam Prabha. They were familiarised with technical areas including audio and video studios. Besides these, hands-on experience facility (through short time recording of audio and video programmes) was also made available for them. Necessary facilities were extended and producers and technical personnel were deputed accordingly in different areas. The details of the visitors are as follows:

S. No.	Name of the Institution	Date of the Visit
1	Jesus and Mary College, New Delhi	3 April, 2018
2	Department of Educational Studies, Central University of Jammu, Jammu	5–6 April, 2018
3	Delegates from NIEPA, New Delhi	6 April, 2018
4	Shri Krishna College of Education	11 April, 2018
5	RCIT, Najafgarh, New Delhi	16 April, 2018
6	Delegates of NIEPA, 34th International Diploma in Educational Planning and Administration	17 April, 2018
7	Aditi Mahavidyalaya, Delhi	20 April, 2018
8	Delegates from Ministry of Education, Myanmar, NIEPA, New Delhi	26 April, 2018
9	Faculty of Education, Jamia Millia Islamia, New Delhi	27 April, 2018
10	Delegates from Islamic Republic of Iran	18 May, 2018
11	NIEPA, New Delhi: Field Visit for the Participants of Third International Program for Educational Administrators (IPEA)	20 July, 2018
12	NIEPA, New Delhi: Field Visit for PGDEPA Participants	20 September, 2018
13	RIE, Bhopal	8–12 October, 2018
14	Shri Lal Bahadur Rashtriya Sanskrit Vidyapeetha	8–9 October, 2018
15	JIMS Institute of Education, Greater Noida	24 October, 2018
16	IBM Corporate Citizenship (India)	24 October, 2018
17	Attachment Training programme for Defence Service Officers of Course 'Management of Academic Institutions', Amity University Noida	17 December, 2018
18	RIE, Mysuru	24 December, 2018



19	Department of Educational Studies, Jamila Millia Islamia	26 December, 2018 – 4 January, 2019
20	DIET, Kozhikode, Kerala	31 December, 2018
21	Lingaya's University, Faridabad	31 January, 2019
22	Galgotia University, Greater Noida	5 February, 2019
23	Maharshi Valmiki College of Education, DU, New Delhi	8 and 22, February 2019
24	K.R.Mangalam University, Gurugram, Haryana	7 February, 2019
25	IVS Sheikh Sarai, GGSIPU, New Delhi	8, 11, 12 March, 2019
26	Gautam Buddha University, Greater Noida	15 March, 2019
27	Maharaja Surajmal Institution, GGSIPU	18 March, 2019
28	Centre of Education, IITE, Gandhi Nagar, Gujarat	18 March, 2019
29	Sri Krishna College of education, Baghpat, GGSIPU	25 March, 2019
30	Vidya Institute, Delhi	29 March, 2019
31	Department of Educational Studies, Jamila Millia Islamia (Internship), New Delhi	26 December, 2018 – 4 January, 2019
32	Nagaland University, Kohima (Internship)	1– 8 February, 2019
33	DIET, Dirang, Arunachal Pradesh	8 January, 2019
34	Attachment training programme of Professional Development Programme for English Language Teachers organised by Department of Education in Languages (DEL)	9 January, 2019
35	DIET, Pasighat, Arunachal Pradesh	10 January, 2019



Faculty of CIET interacting with the students from DES, Central University of Jammu



Students of MA (Education), Jamia Millia Islamia, New Delhi enjoying the session on learning through puppet show at CIET, NCERT

DIVISION OF EDUCATIONAL KITS

Around 150 persons visited the display room of DEK during 2018–19 in which all the education kits are displayed. They appreciated the efforts of the division in making and disseminating the kits. The visitors included teachers, teacher educators and students of B.Ed./B.El.Ed. courses of different institutions. The visitors also included educationists from Bhutan, South Korea and Ethiopia.





APPENDICES

- ❑ **Appendix I**
Publications and Presentations by the NCERT Faculty
- ❑ **Appendix II**
Ph.D. Degrees Awarded during the year under the Supervision of the NCERT Faculty
- ❑ **Appendix III**
Awards and Fellowships
- ❑ **Appendix IV**
Details of the NCERT Committees, as mentioned in MoA, for the year 2018–19
- ❑ **Appendix V**
NCERT's Consolidated Sanctioned Strength of Posts as on 31 March, 2019 and Reservation Position
- ❑ **Appendix VI**
Receipts and Payments Account for the year ended 31 March, 2019
- ❑ **Appendix VII**
Publications Released during the year 2018–19
- ❑ **Appendix VIII**
Publication Division and its Regional Production-cum-Distribution Centres
- ❑ **Appendix IX**
NCERT Constituents and Faculty

Publications and Presentations by the NCERT Faculty

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS (DESM)

Research Papers and Articles

- PRABHA, S. 2019. Variation of the Magnetic Moment of a Bar Magnet with its inclination with the Magnetic Meridian of the Earth. *Physics Education*. 54 (1), 013003.
- KOUL, ANJNI., AND MEHROTRA, ALKA. 2018. An Effective Demonstration of the Preparation of Iron (II) Sulphide,. *School Science Review*. United Kingdom. 99 (369). 85–89.
- KOUL, ANJNI., AND VERMA, RUCHI. 2018. Science Kits as Resource: Issues and Challenges, *Asia-Pacific Forum on Science Learning and Teaching*. 19 (2), pp.
- T.P. SHARMA., AND AYUB KHAN, L.M. SAHA. 2018. Chaos Control in the Problem of a Satellite. *Ganit Sandesh*. 30 (1 and 2), 13–26.

Paper Presentations

- FARKYA, SUNITA. 2018. Ancient Indian Knowledge and Contemporary Science Education. Plenary Lecture in National Conference on *Science Education*. RIE, Bhubaneswar. 29 November–1 December.
- . 2019. Ancient Indian Knowledge: Emerging Perspectives and their Relevance in Contemporary Science Education, lead Talk and cochair in the International Conference on *Emerging Trends and Innovations in School Sciences*. RIE, Bhopal, 6–8 February.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)

Research Papers and Articles

- BHARTI. 2018. Academic Need Assessment and Support Teaching in Inclusive Schools: Role and Responsibilities of Regular Teachers. *International Journal of Education and Humanities*. 7 (14) 70–81.
- . 2018. Responsive Teacher Education: Towards Inclusive Curriculum B.Ed. B.Ed. (Spl. Ed.) and B.P.Ed. *National Journal of Education*. XIII (2), 1–16.
- . 2018. Zero Rejection Policy in Admission of Children with Special Needs — Myth or Reality, Disability. *CBR and Inclusive Education, formerly Asia Pacific Disability rehabilitation journal*. 1 (2). 118–12.

Paper Presentations

- JULKA, A. 2019. Transforming Education. Keynote Address in the *National Symposium on Transformation in Education*. Central Institute of Education, University, Delhi, 12 March.
- . 2019. Home Based Education. Keynote address in the international conference on *Education*, SNDT University. Mumbai, 18 January.



- . 2018. Student's Voice Influencing Policy and Practice in Inclusive Education. Keynote address in the *5 International Conference on Inclusive Education*. Amar Jyoti National Charitable Trust and amp. Christopher Blind Mission, 29 November.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION (DEPFE)

Research Papers and Articles

- MISHRA, P.K., AND CHOUDHARY, K.C. 2018. Cognitive development in early childhood Years. *Anweshan: Journal of Education*. VIII (1), 1–4.
- . 2018. *Bhasha vikash. Prathamik Shikshak*. 2, 45–54.

DEPARTMENT OF TEACHER EDUCATION (DTE)

Research Papers and Articles

- PATEL, M.S. 2019. Issues and Concerns in Pre-primary Teacher Education Programmes in India. *Journal of Emerging Technologies and Innovative Research*. 6 (1). 371–377.
- PATIDAR, JITENDRA KUMAR. 2017. *Shikshak Shiksha me Satatavam Samagra Mulyankan. Bhartiya Adhunik Shiksha*. 37 (4). 96–104.
- PATIDAR, JITENDRA KUMAR. 2018. *Ha! Shikshak Shiksha me 20 Saptahki Internship. Bhartiya Adhunik Shiksha*. 38 (3). 17–24.
- VIJAYAN, K., AND ASHRAF, T.P. 2018. Quality of Relationship Dynamics in Families of Kerala. *International Journal of Research in Social Sciences*. 8 (6). 622–631.
- VIJAYAN., K., AND FAISAL, K.V. 2018. English Language Immersion Programme for Faster Language Mastery and Creativity Enhancement; A conceptual analysis. *International Journal of Research in Social Sciences*. 8 (8). 264–271.
- VIJAYAN, K., AND FATHIMA, JASEENA M.P.M. 2018. Impact of Parenting Style, Emotional Maturity and Social Competence on Cultural Intelligence among Adolescents of Kerala — A Critical Analysis. *Scholarly Research Journal for Interdisciplinary Studies*. 7 (36). 36–43.

Book Chapters

- PATIDAR, JITENDRA KUMAR. 2017. *Samajik Vigyanka Shikshak*. Tiwari, Parveen Kumar (Ed.), *Pedagogy of Social Science (Part I). Block: 2* (133–156). Haldwani: Uttarakhand Open University.
- . 2017. *Samajik Vigyanke Shikshako ka Peshevar Vikas*. Tiwari Parveen Kumar (Ed.), *Pedagogy of Social Science (Part I). Block: 2*, (157–176). Haldwani: Uttarakhand Open University.

Paper Presentations

- PATEL, M.S. 2018. Issues and Concerns in Pre-primary Teacher Education Programmes in India. Paper presented in the national seminar on *Early Childhood Care and Education: Today and Tomorrow*. IIE, Pune and ICSSR, New Delhi. 25–26 September.
- VIJAYAN, K. 2018. Study of Pedagogical Practices of Primary School Teachers. Paper presented in the *Seventh National Conference on Mathematics Education*. Department of Education in Science and Mathematics, NCERT, New Delhi, 20–22, December.



BHARDWAJ, B.P. 2018. Keynote speaker in the national seminar on *Teacher Education in India: Scope and Challenges*. Department of Education, Maharshi Dayanand University, Rohtak, in April.

———. 2018. Keynote address in the international conference on *Teacher Education and Social Concerns: Futuristic Reflection Teacher Education and Social Concerns*, LMTT Dabok, Udaipur, 27–28 April.

BHARDWAJ, B.P. 2019. Keynote address in the national seminar on *Professional Enrichment of Teachers in 21 Century Scenario*, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi. 1 March.

PATIDAR, JITENDRA KUMAR. 2019. Universal Knowledge, Unity of Teachers and Students and the Pedagogical Struggle in Contemporary Indian Public University' and Language Learning for Political Construction. Chaired the sessions in the national seminar on *Teachers' Ideas, Beliefs and Challenges: Influences in the Classroom*. Department of Education, University of Delhi, New Delhi. 3 March.

VIJAYAN. K. 2018. Mathematics Education on 20 December. Chaired the Session in the Seventh National Conference on *Mathematics Education*. Department of Education in Science and Mathematics, NCERT, New Delhi. 20–22 December.

DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

Research Papers and Articles

SONI, ROMILA. 2018. *Gunvata Poorn Prambhik Shikha mein Nirantarta ke liye Poorv Prathamik Shikshak ki Taiyari. Bhartiya Adhunikshikha*. 1 (3). 5–13.

Books

SONI, ROMILA., AND SANGAI, SANDHYA. 2018. *Har Bachha Aham*. NCERT, New Delhi.

Paper Presentations

NIKALJE, VARADA. M. 2019. English Language Teaching in a Culturally Diverse Environment. Paper presented in the national conference on *Education for the Knowledge Society: Opportunities and Challenges*. Central Institute of Higher Tibetan Studies (CIHTS), Sarnath, Uttar Pradesh. 7–9 March.

SONI, ROMILA. 2018. Situational Analysis of DM Schools and Designing of Model Pre-school. Paper presented in the *AECED National Conference on Every Child's Right to Play*, USI Premises. AECED and CECED, Ambedkar University, 23–24 November.

VERMA, SARLA. 2019. Digital Education: A brief Introduction on Graphic Education. Paper presented in the international conference on *ICT in Education*, Amity University, Uttar Pradesh. 11–12 January.

SONI, ROMILA. 2019. Learning through Interest Areas at the Preschool Stage — An Interactive and Innovative Approach. Paper presented in the international conference on *Quality Teacher Education, vis-a-vis School Education*, Department of Education. Osmania University, Hyderabad. 24–25 January.

VERMA, SARLA. 2019. *Vishesh Prashikshan Kendron ke Antargat Vigyan Shikshan me ICT ki Bhoomika*. Paper presented in the national seminar on *ICT Integration in Education and Learning Analytics*, RIE Bhopal. 15–17 March.

SONI ROMILA. 2019. Quality Indicators for Teacher Education. Chaired the technical session in the international conference on *Quality Teacher Education vis-a-vis School Education*, Dept. of Education. Osmania University, Hyderabad. 24 January.



VARDHA, M. N. 2018. Values, Ethics and Knowledge, Technology Integration for Knowledge Consequences. Chaired the session in the national conference on *Education for the Knowledge Society: Opportunities and Challenges*, Central Institute of Higher Tibetan Studies (CIHTS), Sarnath, Uttar Pradesh. 7–9 March.

DEPARTMENT OF EDUCATION IN LANGUAGES (DEL)

Paper Presentations

MEGANATHAN, RAMANUJAM. 2019. Panelist in the Round Table on *Deconstructing Mother Tongue on the Occasion of Celebration of International Mother Language day*. Centre for Advanced Studies (CAS). Zakir Husain Centre for Educational Studies, School of Social Sciences, Jawaharlal Nehru University, New Delhi. 23 March.

SINGH, SANDHYA. 2018. Science and Indian Literature. Paper presented in the national conference on *Ancient Indian Knowledge Science and Technology*, NCERT, New Delhi. 17–19 July.

———. 2018. Ancient Indian Writing and Buddhism. Paper presented in the national seminar on *Aadhunik Hindi Sahitya aur Bodh Dharm*. Central Institute of Tibetan Study, Varanasi, 12 December.

———. 2018. Ancient Indian writing and Buddhism. Paper presented in the national seminar on *Aadhunik Hindi Sahitya aur Bodh Dharm*. Central Institute of Tibetan Study, Varanasi, 13 December.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES (DESS)

Research Papers and Articles

SINGH, JAYA. 2019. Understanding Negotiations in the Teaching Learning of Economics. *Quest in Education*. 47 (1), 2–12.

SRIVASTAVA, GOURI. 2018. Journeying the Transient Phase: Childhood to Youth Experiences from the Field. *Social Welfare*. 65 (3). 7–17.

———. 2018. Journeying through the Pages of History: Women Philosophers and Poets of the Early Period. *Social Welfare*. 65 (7). 15–18.

———. 2019. Locating Women in the Domain of Spirituality: Kanhopatra, Singing Saint Poetess of Maharashtra. *Social Welfare*. 65 (12). 33–36.

SRIVASTAVA, GOURI, ET.AL. 2018. Indigenous Rural Sports: Symbol of our Rich Heritage, *University News*. 56 (48). 45–46.

OJHA, SEEMA S. 2018. Achieving Learning Outcome in History: An Exemplar from history, *Adhigam*. 1 (9). 51–60.

———. 2019. *Seekhne ke Pratifal ki Prapti: Itihas ke Sandarbh me*. *Voices of Teachers and Teacher Educators*. 7 (2). 92–99.

SRINIVASAN, M.V. (IN PRESS). *Social Science Education In Indian Schools: Review of Research and Public Discourse*. *Indian Educational Review*. 57 (1).

Book

SHARAN, SHANKAR. 2019. *Bhartiya Itihas-drishhti aur Marxvadi lekhan*. Kolkata: Pratishruti Prakashan.



Book Chapters

- OJHA, SEEMA S. 2018. Chandigarh. Mandal, P., and Prasad, M.V.S.V. (Eds.), *India: Unity in cultural diversity* (181–184). NCERT, New Delhi.
- . 2018. Dadra and Nagar Haveli. Mandal, P., and Prasad, M.V.S.V. (Eds.). *India: Unity in Cultural Diversity* (185–188). NCERT., New Delhi.
- . 2018. Daman and Diu. Mandal, P., and Prasad, M.V.S.V. (Eds.). *India: Unity in Cultural Diversity* (189–192). NCERT, New Delhi.
- . 2018. Punjab. Mandal, P., and Prasad, M.V.S.V. (Eds.). *India: Unity in Cultural Diversity* (121–126). NCERT, New Delhi.
- . 2018. Uttarakhand. Mandal, P., and Prasad, M.V.S.V. (Eds.). *India: Unity in Cultural Diversity* (165–169). NCERT, New Delhi.
- SINGH, JAYA. 2018. Integration of Peace in the School Curriculum. Mandal, Ajit., and Narula, Deshmukh, Vijaya. (Ed.). *Education in Emerging India* (457–466). Atlantic Publishers and Distributors New Delhi.
- . 2018. A Study on Increasing Food Production in a Sustainable Manner. In Kulshrestha, Dhires., and Kumar, Sunil (Ed.), *Economic revival in India: Issues and challenges* (121–130). Mangalam Publication Delhi.

Paper Presentations

- MALIK, BIJAYA. 2019. Child Sexual Abuse in India: Issues and Concerns. Paper presented in the *International Convention of Psychological Sciences (ICPS). 2019* Association for Psychological Science, Paris, France. 7–9 March.
- SRIVASTAVA, GOURI. 2019. Curriculum Implementation: Issues and Challenges Faced in the States and Union Territories and Suggestions for the next Curriculum Reform. Chaired the session in the national conference on *Emerging Issues in School Curriculum*, Department of Curriculum Studies, NCERT. 6 March.
- . 2019. Engendering Social Science Pathway to Sustainable Development. Chaired the session in the international seminar on *Interdisciplinary Theme Gender Sensitisation and sustainable Development*, Government College Sidhrawali, Gurgaon, Haryana. 29–31 January.
- SHARAN, SHANKAR. 2018. Swami Vivekananda. Chaired the session in the national seminar on *Gandhi and his Contemporaries: Life and Thought*, Indian Institute of Advanced Studies, Shimla. 6–7 December.
- . 2018. Mahatma Gandhi. Chaired the session in the national seminar on *Gandhi and his Contemporaries: Life and Thought*. Indian Institute of Advanced Studies, Shimla. 6–7 December.
- . 2019. *Rashtriya Samarthya Prapti ke liye Hindutva Adharit Samajik Vyavhar ki Avashyakta Evam Sambhavit Paddhatiyan*. Chaired the session in the national seminar on *Varttaman Vaishvik Sandarbh me Hindutva*. The Bhartiya Vichar Manch, Ahmedabad. 2–3 February.
- YADAV, SAROJ. 2018. Role of ICT for Developing Social Concerns. Chaired the session in the international conference on *Teacher Education and Social Concerns*. Lokmanya Teachers Training College (C.T.E.), Dabok, Udaipur Rajasthan. 27 April.
- . 2018. Panelist in the National Consultation on *Formulation of 9th Country Programmes of Assistance (2018–22) between the Government of India and UNFPA*, United Nations Fund for Population Activities, Delhi. 8 October.



DEPARTMENT OF GENDER STUDIES (DGS)

Research Paper and Articles

YADAV, MONA., AND BARNAWAL, DIVYA. 2018. *Muslim Balikaon ki Kasturba Gandhi Balika Vidyalayo me Bhagidari par Adyayan*. *Bharatiya Adhunik Shiksha*. 4, 45–52.

Paper Presentations

AGRAWAL, POONAM. 2018. Scientific Evidence of Effectiveness of Tulasi (*Ocimum Sanctum* and *Ocimum Album*) in Prophylaxis and Treatment of *Diabetes Mellitus*. Paper presented in the national seminar on *Ancient Indian Knowledge: Science and Technology*, DESM, NCERT. 17–19 July.

———. 2018. Science Education for a Better Tomorrow. Keynote address in the National Seminar on *Science Education in North-Eastern States of India: Current Status and Future Directions*. Department of Education, Mizoram University. 3 November.

———. 2018. Gender Issues in Science. Paper presented in the National seminar on *Science Education in North-Eastern States of India: Current Status and Future Directions*, Department of Education, Mizoram University, 3 November.

———. 2018. Technical Session II. Chaired the technical session in the national seminar on *Ancient Indian Knowledge: Science and Technology*, DESM, NCERT, New Delhi. 17–19 July.

EDUCATIONAL SURVEY DIVISION (ESD)

Research Papers and Articles

KUMARI, P. 2018. Teaching Learning in Social Science Classrooms. *RIE, Bhopal Journal of Education*. 1 (2), 19–35.

Paper Presentations

SRIVASTAVA, SRIDHAR. 2018. Panellist in the National Seminar on *Universalisation of Secondary Education towards Integral Model of School Education*. Council of Social Development, New Delhi. 14 July.

PLANNING AND MONITORING DIVISION (PMD)

Paper Presentations

SUBHASH, P.D., RANJAN, ADITYA., AND RAM, SULEKHA. 2019. Non-Violence in Gandhian Philosophy of Education. Paper presented in the national conference on *Locating Gandhian Philosophy of Education and Life in 21st Century*. BLM College of Education, KG Marg, New Delhi. 29 March.

ASHITA, RAVEENDRAN. 2018. Systemic Reforms for Curricular Change. Paper presented in the two-day conference on *Curriculum for Future —Theory and Praxis*. Integrated Education Council of India, Calicut, Kerala. 24–25 December.

———. 2018. Inclusion of Skills and Values within Curriculum Framework. Paper presented in the two-day conference on *Curriculum for Future —Theory and Praxis*, Integrated Education Council of India, Calicut, Kerala. 24–25 December.

———. 2018. Overview of learning outcomes, assessment and evaluation. Paper presented in the two-day conference on *Curriculum for Future —Theory and Praxis*. Integrated Education Council of India, Calicut, Kerala. 24–25 December.

———. 2019. Learning Outcome based Curriculum Development. Paper presented in the *One-day Workshop cum Board of Studies Meeting*. M.E.S College, Mampad, Kerala. 7 January.



RMSA PROJECT CELL

Paper Presentations

- SINHA, SHARAD. 2018. Practices for Sustainable Development in Ancient India. Paper Presented in the national conference on *Ancient Indian Knowledge: Science and Technology*. DESM, NCERT. 19 July.
- . 2019. Findings from Curriculum Study of Eighteen States, Issues and Concerns in Curriculum Implementation. Paper presented in the national conference on *Emerging Issues in School Curriculum*. DCS, NCERT. 5 March.
- SRIDEVI, K.V. 2018. Integration of Traditional Knowledge in Secondary School Curriculum. Poster presented in the national conference on *Ancient Indian Knowledge: Science and Technology*. DESM, NCERT. 19 July.
- . 2018. Augmented reality: A Learning Resource in Science Education. Poster presented in the national conference on *Science Education*. RIE, Bhubaneswar. 29 November– 1 December.
- . 2019. Issues and Concerns in Curriculum Implementation Training Needs Analysis. Paper presented in the National Conference on *Emerging Issues in School Curriculum*. DCS, NCERT. 5 March.
- . 2019. Progress in Knowledge Structures of Science Teachers towards Integrating Content Pedagogy and technology while Teaching. Paper presented in the national conference on *Education for the Knowledge Society Opportunities and Challenges*. CTE, Institute of Higher Tibetan Studies, Saranath Varanasi, 7–9 March.
- SINHA, SHARAD. 2018. Modern India shall Learn Water Management from Traditional and Indigenous Water Conservation Systems of Ancient India. Chaired the session in the national conference on *Ancient Indian Knowledge: Science and Technology*. DESM, NCERT. 19 July.

INTERNATIONAL RELATIONS DIVISION (IRD)

Paper Presentations

- MANDAL, PRATYUSA. 2018. Delivered a Special Lecture in the National Seminar on *Decolonising of Indian Minds*. Department of History, Culture and Archaeology. HNB Garhwal University, Uttarakhand. 7 April.
- . 2019. *Vartmaan Shiksha Paddati, Srijanatmakta Evam Bazaarvaad*. Keynote address in the national conference on *Sunder Lal Sharma Vishwavidyalaya*, Bilaspur, Chattisgarh. 16–17 February.

LIBRARY AND DOCUMENTATION DIVISION (LDD)

Book Chapter

- JAIN, POOJA. 2019. Open Access Information Resources : Some Major Platform in India. Babbar, Parveen., Kar, Bebal C., Jain P.K., and Paliwal, Geeta. (Eds.). *Rethinking libraries and librarianship*. (402–410) Bookwell Delhi.

Paper Presentations

- SAMANTARAY, MOORTTIMATEE. 2018. Library Heart of the School. Invited lecture in the conference on *Innovation Spaces-School Libraries for 21st Century*, MRIS 46, Gurugram. 24 May.



CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)

Paper Presentations

- KUMAR, ABHAY. 2018. Use of ICTs in Education. *Kurukshetra: A Journal on Rural Development*. 67 (2). 45–48.
- BEHERA, AMARENDRA P. 2018. Panelist in the Education Summit *Effective Policy for Quality Outcomes*. Confederation of Indian Industries (CII), AICTE Headquarter, New Delhi. 4 October.
- KUMAR, ABHAY. 2018. Whatever happened to Constructivism in Teaching-learning of Science: A Study of Classroom Processes in Selected Schools of E. Khasi Hills and Jaintia Hills of Meghalaya. Paper presented in the national conference on *Science Education*, RIE, Bhubaneswar. 1 December.
- . 2019. Environmental education in the times of Sustainable Developmental Goals. Paper presented in the international conference on *Emerging Trends and Innovations in School Sciences*, RIE, Bhopal and MP Council of Science and Technology, Bhopal and Commonwealth Educational Media Centre for Asia (CEMCA), New Delhi, 6–8 February.
- BEHERA, AMARENDRA P. 2019 Keynote address in the national seminar on Technology Enabled Learning, Gandhigram Rural Institute, Madurai, Tamil Nadu, 8–9 February.
- MAMUR ALI, MOHD. 2019. Enhancing Understanding of Algebraic Concepts using Technology. Paper Presented in the National seminar on *ICT Integration in Education & Learning Analytics*, RIE, Bhopal, 15–17 March.

PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE)

Research Papers/Articles

- SHUDHALWAR, DEEPAK. 2018. Software reliability modeling using neural network technique. *International Journal of Computer Sciences and Engineering*, 6 (9), 513–524.
- SHUDHALWAR, DEEPAK. AND KUMAR, DIXIT GANESH. 2018. Optimized neural network architecture for the classification of voice signals. *International Journal of Computer Sciences and Engineering*. 6 (9), 502–506.
- SHUDHALWAR, DEEPAK. AND AGRAWAL, PALLAVI. 2019. Splicing of multiple fibres using ribbon splicer by electric arc method. *International Journal of Current Engineering and Scientific Research (IJCESR)*. 6 (1), 1258–1263.
- . 2018. Employment opportunities and skill develop in telecom sector. *Indian Journal of Vocational Education*, 24–25, 77–86.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Research Papers and Articles

- ARYA, A.K. 2018. Ionic liquid [PyN(CH₂)₄SO₃H][CH₃PhSO₃] mediated and promoted eco-friendly one-pot Domino Synthesis of Benzothiazolopyrano/Chromenopyrimidine Derivatives. *Current Organocatalysis (Bentham)*, 5 (3), DOI: 10.2174/2213337205666181003142757.



- MEENA, O.P. 2018. Learning of Flame Test using Low Cost Experiment. *Journal Education Trends*. 1(2).155.
- NAINAWAT, A.K. 2018. Eco-friendly Synthesis of Alcohols by Microbial and Electrochemical Techniques. *Int. J. ChemTech Res.* 11(02). 137–141.
- . 2018. A Study of Classroom Practices on the Impact of In-service Training Programme at Secondary Level. *Educational Trend*, 1(1). 76.
- . 2019. Corrosion inhibition of Aluminium by Alkloid Extract of Aerial Part of Euphorbia Nerifolia Linn in HCL solutions. *International Journal of ChemTech Research*. 12 (02), 234–242.
- PAREEK, R.B. 2018. A Study of Classroom Practices on the Impact of In-service Training Programme at Secondary Level. *Educational Trends*, 1 (1), 76.
- . 2019. An Assessment of Availability and Utilisation of Laboratory Facilities for Teaching Science at Secondary Level. *Science Education International*. 30 (1), 75–81.
- SHARMA, R.K. 2018. Qualitative Analysis of Science Question Paper of Class X board Examination. *Journal Education Trends*. 1 (1), 91.
- . 2018. Learning of Flame Test using Low Cost Experiment. *Journal Education Trends*. 1(2), 155.
- . 2018. A Study of Classroom Practices on the Impact of In-service Training Programme at Secondary Level. *Educational Trends*. 1 (1) 76.
- SHARMA, S.V. 2018. An Investigation into Students' Understanding about the Concepts of Energy at Senior Secondary Level. *Educational Trends*. 1 (2). 169–177.

Paper Presentations

- CHAURASIA, P.K. 2018. History of Mathematics in India. Paper presented in the national conference on *Ancient India Knowledge: Science and Technology*, DESM, NCERT, New Delhi. 17–19 July.
- . 2019. Learning outcomes in geometry at secondary stage. Paper presented in the national seminar on *Learning Outcomes: Best Pedagogical Practices* (NSLO-2019), RIE, Ajmer. 7–9 March.
- . 2019. Keynote on Higher Education Opportunities and Challenges for Senior Secondary Students. Paper presented in the seminar on *Higher Education Opportunities and Challenges for Senior Secondary Students*, Bhagwant University, Ajmer. 25 February.
- MEENA, MEENAKSHI. 2018. Changing Structure of Teacher Education Curriculum. Paper presented in the National Seminar on *Challenges of Teachers and Education System*, Govind Guru Janjatiya University and Bhartiya Vidya Bhawan Teacher Training College, Banaswara. 28–29 October.
- . 2019. Learning Outcomes. Paper presented in the national seminar on *Learning Outcomes: Best Pedagogical Practices*, RIE, Ajmer, 7–9 March.
- . 2019. Need and Importance of Teachers Training Programme. Paper presented in the national seminar on *Building Effective Schools: Challenges and Suggestions*, Arya Narayani Devi Teachers Training College, Ajmer. 21 February.
- NAINAWAT, A.K. 2018. Green Chemical Synthesis of Alcohols using Electrochemical and Microbial Catalysts. Paper presented in the national seminar on *Recent Trends & Advances in Chemical Science and their Impact on Environment* (RTACIE-2018), Amity University, Jaipur. 13 April.



- . 2018. Aparajita Flower Extract as a Natural Indicator in Volumetric Analysis. Paper presented in the national conference on *Recent Advances at Interfaces of Physical and Life Sciences (RAIPLS-2018)*. University of Rajasthan, Jaipur. 6–7 July.
- PAREEK, R.B. 2019. An Exemplar Package on Learning Outcomes in EVS/Science at Elementary Stage. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.
- . 2019. An Exemplar Package on Learning Outcomes in Mathematics at Elementary Stage. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.
- RANJAN, RAJIV. 2019. Learning Outcomes in Functional Academics of Children with Special Needs in Inclusive School and Special School. Paper presented in the national seminar on *Learning Outcomes: Best Pedagogical Practices*. RIE, Ajmer. 7–9 March.
- SHARMA, PATANJALI. 2018. An Exemplar Package on Learning Outcomes in Mathematics at Elementary Stage. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.
- SHARMA, R.K. 2018. Computational Investigations on Modern Ullmann Reaction: Screening of the Ligands. Paper presented in the national conference on *Recent Advances at Interfaces of Physical and Life Sciences*, Department of Chemistry. Amity University, Jaipur. 13 April.
- . 2018. Green Synthesis of Polyamide by Polycondensation of Phthalimide and Ethylenediamine. Paper presented in the national seminar on *Recent Trends and Advances in Chemical Sciences*. Department of Chemistry University of Rajasthan, Jaipur. 6–7 July.
- SINGH, V.P. 2018. Reviewing Ancient Indian Knowledge of Chemistry. Paper presented in the national conference on *New Frontiers of Research and Education in Chemical Sciences and National Convention of Chemistry Teachers (NCCT 2018)*, Association of Chemistry Teachers (ACT) c/o HBCSCSE (TIFR). Mumbai and RIE, Ajmer. 25–27 October.
- . 2018. Some Evidences of Knowledge of Science and Technology in Ancient India. Paper presented in the national conference on *Ancient Indian Knowledge: Science and Technology*. DESM, NCERT. 17–19 July.
- . 2018. Teaching of Chemistry through Innovative Hands on Activities. Paper presented in the national conference on *New Frontiers of Research and Education in Chemical Sciences and National Convention of Chemistry Teachers (NCCT 2018)*. Association of Chemistry Teachers (ACT) c/o HBCSCSE (TIFR). Mumbai and RIE, Ajmer. 25–27 October.
- . 2018. Blended Strategies for Training of Science Teachers for Improving Learning Outcomes at Elementary level. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.
- . 2018. An Exemplar Package on Learning Outcomes in EVS/Science at Elementary Stage. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.
- YADAV, SARYUG. 2019. Learning Outcomes Oriented Pedagogy for English Language at Elementary Stage: Some Reflections. Paper presented in the national seminar on *Learning Outcomes (NSLO-2018)*. RIE, Ajmer. 7–9 March.



REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Research Papers and Articles

- MANDAL, J. 2018. Shoot Organogenesis and Plant Regeneration in *Carum Carvi*, *Phytomorphology*. 68 (3 and 4). 103–109.
- PRAJAPATI, R.P. 2019. *Spent Catalyst Coming out from Ammonia Synthesis Fertilisers Plant and Impact on Environment JECET*. 8 (1). 14–32.
- MASKI, K., AND CHOURASIA M. 2018. New Paper as Initiative to STEM Education in Making Career for Students in 21st century at Vidyalaya Level. *International Journal of Sciences and Research*. 7 (II). 1734–1739.
- KAKARIA V.K., NICHAT, A.R., AND SHAFFI, S.A. 2019. Study of Combined Impact of *Cholrella Vulgaris* and *Spirulina Platensis* on Sub lethal and Lethal Concentrations of copper and Zinc Toxicity on *Labeo Rohita* (Nam.). *Clarias Batrachus* (Linn) and *Channa Punctatus* (Bloch). *IOSR. Journal of Pharmacy*. 9 (1). 44–49.
- SINGH, CHITRA., AND UPADHYAYA, S.K. 2018. Apparent Molar Volume and Expansibility Behaviour of Magnesium Calcium and Strontium Caprate in Non-aqueous Medium. *Biol. Chem. Chron*. 4 (2). 131–135.

Book

- MAKWANA, SURESH K. 2019. *Gujarati Gazal and Sufirang*. Mumbai: Navbharat Publication.

Paper Presentations

- THOMAS, AJI. 2019. E-educational simulator PhET: A Tool to Enhance Learning in Science and Mathematics. Paper presented in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. 15–17 March, 2019.
- MASKI K., AND CHOURASIA, M. 2019. The changing role of classroom teacher with the use of efficient e technologies in pedagogy. Paper presented in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. March 15–17.
- . 2019. Effective Science Pedagogy with Use of Technology — Channelizing Smart Phones in Learning Science in Secondary Class. Paper presented in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. March 15–17.
- . 2019. Challenges of Integrating Content Pedagogy and Technology of Integrating Learning of Science at Upper Primary Level in Indian Context. Paper presented in the International conference on Emerging Trends and Innovations in School Sciences. RIE, Bhopal. 6–8 February.
- SHARMA, RASHMI., AND TIWARY L. K. 2018. Use of Senior Secondary Chemistry Laboratory Kit for Promotions of Pre-trial Skills amongst Students in the State of M.P. Paper presented in the national conference on New Frontiers of Research and Education in Chemical Sciences. RIE, Ajmer. 25–27 October.
- SHARMA, RASHMI. 2019. Technology-pedagogy Integration and Teachers' Training Programme: An Analysis of Pre-service Course with Special Focus in Science Teaching. Paper presented in the national seminar on ICT integration in education and learning analytics. RIE, Bhopal. 15–17, March.
- . 2019. Inclusiveness in Sciences Education: Issues and Concerns. Panelist in the International Conference on *Emerging Trends and Innovations in School Sciences*. RIE Bhopal. 6–8 February.



- PANDAGALE, SANJAY. 2019. ACT in Assessment of Learning. Chaired the session in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. 15–17 March.
- CHUGHTAI, I.B. 2019. Inclusive Education. Chaired the session in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. 15–17 March.
- KAKARIA, V.K. 2019. Pedagogy and Technology Integration Practices in School Subjects. Chaired the session in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. 15–17 March.
- SINGH, CHITRA. 2019. Pedagogy Technology Integration Practices in School Subjects Science and Mathematics. Chaired the session in the national seminar on *ICT Integration in Education and Learning Analytics*. RIE, Bhopal. 15–17 March.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

Research Papers and Articles

- NEGI, P.L. 2018. User Persistence on Visiting Institutional Library. *Indian Journal of Library and Information Science*. 12 (1). 50–54.

Book Chapter

- BEHERA, L., AND GOWRAMMA, I.P. 2018. School Readiness of Scheduled Tribe Students of Odisha. In Pradhan, N., Sahoo, S.N., & Devi, T. (Eds). *Quality, Equity and Inclusiveness in School Education* (11-25). *Sikshya Vikash Samitte*: Bhubaneswar.

Paper Presentations

- SAHA, A. K. 2018. A Note on Hyper Singular Integrals. Paper presented in the UGC-DEB sponsored one-day national conference on *Distance Education and its Obscurities*, Netaji Subhas Open University, Kolkata, West-Bengal. 9 June.
- . 2018. Understanding Calculus with ICT Tool: Geogebra. Paper presented in the *Seventh National Conference on Mathematics Education*, DESM, NCERT. New-Delhi. 20–22 December.
- GOWRAMMA, I. P. 2017. Understanding Learners-key to Inclusive Approach. Paper presented in the *International Conference on Embracing Inclusive Approaches*, DISES TED, Cape Town South Africa. 3–5 July.
- BEHERA, L. 2018. Examination Reforms in India: Towards Quality and Excellence in Higher Education in India. Paper presented in the national seminar on *Examination Reform for Quality Higher Education*, Ravenshaw University, Cuttack. 22–23 December.
- . 2018. Guidance and Counseling for Twenty First Century Classrooms. Chaired the session in the national seminar on *Guidance and Counseling for School Children: Policies, Practices and Priorities*. Gyanprakash, Boudh. 15 April.
- . 2018. Inclusive Education in India: Policies, Practices and Priorities. Keynote address in national seminar on *Rehabilitation of Children with Special Needs*, Joteghanashyam Kartick Teachers Training College. Paschim Mednipur, West Bengal. 18 April.
- . 2018. Field Based Activities in Pre-service Teacher Education: Towards Development of Life Skills. Chaired the session in the national seminar on *Life Management Skills*, Begunia College, Khurdha. 30 September.



———. 2018. Enhancing Learning Outcomes at School Level: Challenges and Priorities. Keynote address in the national seminar on *Improving Learning Outcomes at Elementary School Stage: From Theory to Action*. Sikshya Vikash Samittee. Cuttack, Odisha. 13 October.

BAGUI, D. 2019. Two Self-narratives: Some Observations. Paper presented in the international conference on *Education, Humanities*. RIE, Bhubaneswar, 9 March.

PANDA, B.N. 2018. Keynote Speaker in the National Seminar on *Rehabilitation of Special Children in the General School*, Jogamaya College of Education. West Bengal. 17 April.

PANDA, B.N. 2018. Professional Development of Science Teachers. Chaired the technical session in the national seminar on *Science Education*. RIE, Bhubaneswar. 29–1 December.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

Research Papers/Articles

HARINATH, P.R. 2018. *Shiva Sarana Literature*. Telugu Literature. *Sharana Patha*. 20 (1). 12–14.

———. 2018. *Visvanatha Seesa Nirmana Padhdhathulu-oka Drushti*. *Dravida Bharathi*, 1 (1). 58–66.

———. 2018. *Srimad Ramayana Kalpavriksha Bala Kanda Chandah Shilpamu*. *Samshodhana*. 2 (3). 57–64.

———. 2018. *Jilugula Telugu*. *Tejamu*. 11 (1). 32.

———. 2019. *Koththa Pelli Koothuru*. *Tejamu*. 11 (2). 68.

NAGARAJ, G, SUKUMAR A., AND TANGPU, V. 2019. Chalk Chromotography: A Low-cost Investigatory Profile for High School Students. *International Journal of Recent Scientific Research*. 10 (3 A). 30693–30696.

TANGPU, V., AND RESHMA, M.D. 2018. Analysis of Morphogenetic Traits among the Population of RIE, Mysuru: Campus to Determine the Frequency of the Phenotype. *International Educational Scientific Research Journal*. 4 (5). 77–83.

Paper Presentations

HARINATH, P. R. 2018. *Ekoji Ramayanam—A Study*. Paper presented in the national seminar on *Thanjavur Cultural and Literary Backgrounds*. Thanjavur, Tamil Nadu. 4 March.

TANGPU, V. 2019. Use of ICT in Social Science Teaching. Chaired a session in the national the seminar on *Innovative Practices in Teaching Social Science at Secondary Level*. Regional Institute of Education, Mysuru. 15 February 2019.

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM, MEGHALAYA

Research Papers and Articles

DEY, TULIKA, ET AL. 2018. Understanding the Natural World Through the Use of Earth Science Kit. *Journal of Indian Education*. XLIII (4). 44–57.

———. 2018. Sources and Transport of the Heavy Minerals in Some Gondwana Basins of Extra-peninsular Eastern India. *Journal. Indian Association of Sedimentologists*. 35 (2). 59–81.



- DEVI, CH. SARAJUBALA. 2018. Tribal/minority Languages in Education: A Case of Karbi and Missing of Assam. *Language in India*. (18:5). 342–350.
- . 2019. An Ethno-linguistic Study of Curse Utterances in Meitei Society of Manipur. *Language in India*. 9 (3). 257–266.
- . 2018. Minority Languages in Indian Linguistic Scenario: Issues and Challenges. *Abhivyakti*, 1 (I). 24–25.
- SHARMA, U. 2019. Teaching Addition Skills to Children with Slow Learners. *Ajanta*, VIII (I). 63–69.
- . 2018. Educating Children with Disabilities. *Abhivyakti*, I. 28–29.
- . 2018. Including Children with Disabilities in General Education System. *Journal of Indian Institute of Research and Development for Differently Able (JIIRDDA)*. 4. 6–10.

Books Chapters

- DEVI, CH. SARAJUBALA. 2018. Sustaining Tribal/Minority Languages in Education: A Case of North-East. In Kharchandy, David (Ed.), *Understanding the tribes of Asia* (101–110). New Delhi: Lakshi Publishers and Distributors.
- DEY, TULIKA. 2018. Sustainable Development of Society. In Borah, Mousami., and Sarma., Jyotirupa (Eds.), *Development Issues and Concerns* (185–191). Guwahati: Arya Vidyapeeth College. Diamond Jubilee Celebration Commemorating Book.

Paper Presentations

- DKHAR, B. R. 2018. Education as a Key Driver for Sustainable Development Goals: A Study on Enrolment. Paper presented in the national conference *on Achieving Sustainable Development Goals 2030: Education as a Catalyst*, NERIE, Umam. 15–16 November.
- NEWMEL, T. 2018. The Whole School Approach to Education for Sustainable Development Goals. Paper presented in the national conference *on Achieving Sustainable Development Goals 2030: Education as a Catalyst*, NERIE, Umam. 15–16 November.
- WALLANG, G. MELISSA. 2018. Equity in Learning. Paper presented in the national conference *on Achieving Sustainable Development Goals 2030: Education as a Catalyst*, NERIE, Umam. 15–16 November.
- . 2018. Sign Language in Education and the Efforts taken by the NCERT. Paper presented in the national seminar on *Strategic Plan for Rehabilitation of PWDs in NE States*, MSJE, GOI, and AYNISHD, Mumbai. 30–31 August.
- DEVI, CH. SARAJUBALA. 2018. School Adolescence Education Programme for a Better Tomorrow. Paper presented in the national seminar on *Adolescence for Social Change*, RKSD College of Teacher Education, Imphal. 19–20 September.
- . 2018. Challenges of Quality Education for Sustainable Development: A Case of Mamit District of Mizoram. Paper presented in the national conference *on Achieving Sustainable Development Goals 2030, Education as a Catalyst*, NERIE. 15–16 November.
- B. KHARLUKHI. 2018. Functioning of School Presented Management Committees in Elementary Schools of Meghalaya. Paper in the national conference on *Achieving Sustainable Development Goals 2030, Education as a Catalyst*, NERIE, Umam. 15–16 November.



- SHARMA, U. 2019. Pedagogical Evolution in Inclusive Classroom. Invited Talk in Student Seminar on *Inclusive Education*, Professor. Qoumrul Hoque School of Education, University of Science and Technology Meghalaya. 30 March 2019.
- DKHAR, B.R. 2018. Education and Sustainable Development. Chaired the session in the national conference on Achieving Sustainable Development Goals 2030, Education as a Catalyst, NERIE, Umam. 15–16 November.



APPENDIX II

Ph.D. Degrees Awarded during the Year under the Supervision of the NCERT Faculty

S. No.	Title of the Study	Name of the Supervisor	Name of the Research Scholar	Constituent Unit of NCERT	Name of the University	Year
1.	A Comparative Study of Students of Jawahar Navodaya Vidyalayas and Kendriya Vidyalayas on Intelligence, Creativity and Academic Task Commitment	C.G. Venkatesha Murthy	Kiran, N.C.	RIE, Mysuru	Department of Studies in Psychology, University of Mysore	2018
2.	Effectiveness of Selected Interventions on Affective and Cognitive Resources of Female Primary Care Givers of Alzheimer's Patients	C.G. Venkatesha Murthy	Vijayalakshmi, K.	DEE, RIE, Mysuru	Department of Studies in Psychology, University of Mysore	2018
3.	Effectiveness of Concept Mapping Strategy on Cognitive Process in Science at Secondary Level	R. Mohalik	Saradindu Behera	RIE, Bhubaneswar	Utkal University	2019
4.	Effectiveness of Constructivist Approach on Meta-Cognitive Skills and Achievement in Science at Elementary Level	R. Mohalik	Subrat Kumar Chhatoi	RIE, Bhubaneswar	Utkal University	2019
5.	Development of Life Skills Training Package for Tribal Students at Secondary Level	R. Mohalik	Bhawani Shankar Gadatia	RIE, Bhubaneswar	Utkal University	2019
6.	A Study of Implementation of the RTE act 2009 in Odisha	R. Mohalik	Poulastya Mahananda	RIE, Bhubaneswar	Utkal University	2019
7.	Effectiveness of Teacher Training Programme Under Sarva Siksha Abhiyan (SSA) in Odisha	L. Behera	Dash, S.	RIE, Bhubaneswar	Utkal University	2018
8.	Relationship Dynamics as a Predictor of Life Script Formation, Emotional Intelligence, and Psychological Resilience in Secondary School Students of Kerala	K. Vijayan	Ashraf. T.P.	DTE	School of Pedagogical Sciences, Kannur University Kerala	2019

Annual Report 2018–2019



Awards and Fellowships

A) NCERT Doctoral Fellowships

S. No.	Name and Address of the Doctoral Fellows	Title of the Study
1.	Karre Sailu, Telangana	Education of Disadvantaged Children in Child Care Institution and its Impact
2.	Zenia Thangjam Shillong, Meghalaya	A Study of Growth and Nutritional Status of Orphan and Non-Orphan Children of Imphal Valley, Manipur
3.	Dibya Rumba Darjeeling, West Bengal	Effect of Social Constructivist Model of Teaching on the Academic Achievement of Secondary School Students
4.	Ms. Munmi Borah District Jorhat, Assam	Effectiveness of Intervention Programme in Fostering Academic Resilience Among Secondary Level Students of Flood Affected Areas in Assam
5.	Sandiya Siddiq Mysuru, Karnataka	Mathematics Education
6.	Rajeev Rajan District Kollam, Kerala	Development of Tinkering Pedagogy Package in Stem for Enhancing Innovation Skills among Secondary School Students
7.	Sandhya Kumar District Palakkad, Kerala	Effect of Experiential Pedagogy on Science Achievement and Scientific Attitude Among Tribal Students at Secondary Level in Kerala
8.	Farheen Rafat District Kanpur, Uttar Pradesh	Teaching-Learning Styles and Learning Environment as Determinations of Misconceptions in Sciences at Secondary School Level
9.	Chandrani Borkotoky District Dibrugarh, Assam	Human Development and Family Studies
10.	Megha Dadhwal New Delhi	Preparing Teachers for Classroom Diversity: A Study of Curriculum and Pedagogic Practices of D.El.ED. Programme in Delhi



B) Awardees of All India Competition on Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions

LIST OF AWARDED SCHOOLS AND INSTITUTIONS 2018-19

S. No.	Topic or Title	Name of the School and Education Institutions	Name and Designation Project Coordinator
1.	Mind Mapping an Innovative ICT Oriented Approach to Learn and Memorise	Jawahar Navodaya VidhyalayaTheog District, Shimla HP, 171201	Yogesh Kumar, PGT Biology
2.	Yuva Gram Panchayat Competition	SCERT, Haryana Sohna Road Gurugram, 122001, Haryana	Braham Parkash Lecturer
3.	Comparative Study of PEN_PAPER and ICT based Exam at School Level	Govt. Middle School Ramgarh (Nawapind) Khanna, Ludhiana Punjab- 141401	Kapil Dev Soni, Science Master
4.	Developing ICT Enabled Multimedia Educational Videos in Regional Languages Using Local Resources (Teacher & Students)	DIET, Sopore Opposite Habibulla Eye Hospital, Town Hall, Sopore Baramulla-193201 Jammu &Kashmir	Sajad Akbar Rather Teacher
5.	Development of Classroom Support Material in Mathematics Using Geogebra Application	DIET, Uddham Singh Nagar Rudrapur Uttrakhand-263153	Mohan Singh Rawat, Lecturer
6.	Magic of Science Experiments in My School	Jepar Primary School At-Jepar Ta-Chuda District Surendranagar Gujarat -363410	Dipak Kumar Ratilal Mehta, Assistant Teacher
7.	Creating Audio Books for Developing Linguistic Skills and Making it Available for Students and Community Through Social Media	Zilla Parishad School Anjurfata, Anandnagar, Rahnal Taluka-Bhiwandi District -Thane Maharashtra - 421302	Alankar Kanha Warghade, Primary Teacher
8.	Movable Library	Kalol Primary School No.9 Near Ice Factory, Kalol District - Gandhinagar Gujarat - 382721	Priti Roopchand Gandhi, Head Teacher



9.	Improving the Students Grammar Through Innovative Grammar Games-(Play Way Method)	KV No.1. (MR Campus) Shahibaug, Near Police Commissioner Office Ahmedabad, Gujarat -380004	Rashmi Jain Bayati, <i>PRT</i>
10.	Construction and Effectiveness of the Learning Strategies Programme for the Students of Senior Secondary School	Govt. Model School, Avaniya At- Avaniya, Town- Ghogha District - Bhavnagar Gujrat - 364110	Nikunj Kumar B. Vyas, <i>Shiksha Sahayak</i>
11.	Beauty of Art through Golden Ratio Exploring Nature's Great Secrets through Mathematics Integrated Art Education (MIA)	Navrachana School, Sama Vadodara Gujarat - 390008	Deepak Mahakul, <i>Visual Art Director</i>
12.	A Smart Hand Glove for the Children with Hearing and Speech Impairment	Navrachana School, Sama Vadodara Gujarat - 390008	Tushar Upadhyay, <i>Asssistant Teacher</i>
13.	Create Interest and Motivate Students Towards the Subject Mathematics by Applying Various Techniques	Jawahar Navodaya Vidyalaya Gurujanga, Khurda Odisha - 752057	Pramila kumari Sahoo, <i>TGT, Mathematics</i>
14.	Teenagers of Tomorrow Through Life Skill Experience	SDSM School for Excellence Dispensary Road, Sidhgora, PO Agrico, Jamshedpur Jharkhand - 831009	Abha Biswakarma, <i>PGT</i>
15.	Effectiveness of the Vocabulary Kit in Developing the Vocabulary	Balabhadrapatana UGUP School Balabhadrapatana, Palanka Puri, Odisha - 752011	Akhaya Kumar Dash, <i>Assistant Teacher</i>
16.	Correlating Language Learning with Other Subjects (Maths& EVS)	Government Primary School Kalitheerthal, Kuppam Madagadipet (Post) Puducherry - 605107	B. Suganthi, <i>Primary School Teacher</i>
17.	Gamified Grammar – G2	Govt. Higher Secondary School GingeeTaluk Villupuram District Tamil Nadu – 604153	S. Dhilip, <i>English Graduate Teacher</i>



18.	Secondary School Students Ability to Formulate Problems from the Diagrams	Zilla Panchayat Primary Boys High School Mukteswaram Antapuram Mandal East Godavari District Andhra Pradesh-533201	T. S. V. S. Suryanarayana Murty, <i>School Assistant (Maths)</i>
19.	Enhance Science Learning through Exp EYES Junior Toolkit	Government Boys Higher Secondary School, Sayalgudi Ramanathapuram District Tamil Nadu – 623120	Bergin G., <i>PGT Physics</i>
20.	Effectiveness of Medium – Impact of Blend in Teaching of Integer Arithmetic and Algebra for Class VII Students	District Institute of Education and Training Palayampatti Virudhunagar District Tamil Nadu– 626112	D. Kasi, <i>Lecturer</i>
21.	Improving Students Cognitive Retention through Drawing Techniques at Elementary Level in Sivganga District	DIET, Kalayarkoil Sivagangai District Tamil Nadu – 630551	A. Ananthi, <i>Lecturer</i>
22.	Learning Different Landforms and their Conventional Colour Symbols through Games	DIET, Kalayarkoil Sivagangai Dt. Tamil Nadu – 630551	M. Chinnappan, <i>Principal</i>
23.	Developing ASK in Organic Farming among Prospective Teachers	St. Thomas College of Teacher Education Mylacompu, Thodupuzha Idukki, Kerala-685608	Johnson Mathew, <i>Vice Principal</i> . C.C. Kurian, <i>Assistant Professor</i>
24.	Identification and Management of Scholastic Problems of Children	Delhi Public School, Duliajan, Dibrugarh Assam - 786602	Nandita G. Sarma, <i>PGT English Psychological Counsellor</i>
25.	Virtual Classroom System	Jawahar Navodaya Vidyalaya Rohtak, Piple, Naya bazar West Sikkim, Sikkim - 737121	Prashant Kumar, <i>PGT Computer Science</i>



Details of NCERT Committees, as mentioned in MoA, for the year 2018–19

- ❑ 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, Mysuru
- ❑ Managing Committee of NERIE, Umiam (Meghalaya)



GENERAL COUNCIL

- | | |
|--|--|
| (i) The Minister of Human Resource Development
President (ex-officio) | 1. Prakash Javadekar
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001 |
| (ii) Chairman of the University Grants Commission
(ex-officio) | 2. D.P. Singh
<i>Chairman</i>
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi-110002 |
| (iii) Secretary to the Ministry of Human Resource Development
(Department of Education)
(ex-officio) | 3. (i) Anil Swarup
<i>Secretary</i>
Department of School Education & Literacy
Ministry of HRD
Government of India
Shastri Bhawan New Delhi-110001.
(up to 30.06.2018)
(ii) Rina Ray
<i>Secretary</i>
Department of School Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(from 01-07-2018) |
| (iv) Four Vice-Chancellors of Universities, one from each region, nominated by the Government of India. | 4. H.M. Maheshwaraiah
<i>Vice-Chancellor</i>
Central University of Karnataka
Kadaganchi, Aland Road
Gulbarga-585367
Karnataka

5. R.C. Kuhad
<i>Vice Chancellor</i>
Central University of Haryana
Jant-Pali,
Mahendergarh-123029
Haryana |



- (v) One representative of each State Government and Union Territory with a legislature who shall be the Education Minister of the State and Union Territory (or his representative) and in the case of Delhi the Chief Executive Councilor Delhi (or his representative)

6. S.A. Bari
Vice Chancellor
Central University of Gujarat
Sector-29,
Gandhinagar-382030
Gujarat
7. H.C.S. Rathore
Vice Chancellor
Central University of South Bihar
SH-7, Gaya-Panchanpur Road
Post: Fatehpur (Tekari)
Gaya-824236
Bihar
8. Minister for School Education
Government of Andhra Pradesh
A.P. Secretariat Building
Hyderabad-500022
9. Minister for School Education
Government of
Arunachal Pradesh
Itanagar-791111
10. Minister for School Education
Government of Assam
Janata Bhawan, Dispur
Assam-781006
11. Minister for School Education
Government of Bihar
New Secretariat Building
Patna-800015
12. Minister for School Education
Government of Chhatisgarh
Raipur
Chhatisgarh-492007
13. Minister for School Education
Government of Goa
Goa Secretariat
Panaji-403001



14. Minister for School Education
Government of Gujarat
Block No. 1, Sachivalaya
Gandhi Nagar-382010
15. Minister for School Education
Government of Haryana
Haryana Civil Secretariat
Chandigarh-160001
16. Minister for School Education
Government of Himachal
Pradesh
Shimla-171002
17. Minister for School Education
Government of Jharkhand
Ranchi
Jharkhand-834004
18. Minister for School Education
Government of Jammu &
Kashmir
Srinagar-180001
19. Minister for School Education
Government of Karnataka
Vidhan Saudha
Bangaluru-560001
20. Minister for School Education
Government of Kerala
Ashoka Nanthenocode
Thiruvananthapuram-695001
21. Minister for School Education
Government of Madhya
Pradesh
Bhopal-462001
22. Minister for School Education
Government of Maharashtra
Mantralya Main
Mumbai-400032
23. Minister for School Education
Government of Manipur
Manipur Secretariat
Imphal-795001



24. Minister for School Education
Government of Meghalaya
Meghalaya Secretariat
Shillong-793001
25. Minister for School Education
Government of Mizoram
Aizawl-796001
26. Minister for School Education
Government of Nagaland
Kohima-797001
27. Minister for School Education
Government of Odisha
Odisha Secretariat
Bhubaneswar-751001
28. Minister for School Education
Government of Punjab
Chandigarh-160017
29. Minister for School Education
Government of Rajasthan
Government Secretariat
Jaipur-302001
30. Minister for School Education
Government of Sikkim
Sikkim Secretariat, Tashilling
Gangtok-737101
31. Minister for School Education
Government of Tamil Nadu
Fort St. Georg
Chennai-600009
32. Minister for School Education
Government of Telangana
Telangana Secretariat
Hyderabad-500022
33. Minister for School Education
Government of Tripura
Civil Secretariat
Agartala-799001
34. Minister for School Education
Government of Uttar Pradesh
Lucknow-226001



35. Minister for School Education
Government of Uttarakhand
Dehradun
Uttarakhand-248008
36. Minister for School Education
Government of West Bengal
Vikas Bhawan
Salt Lake
Kolkata-700001
37. Minister for School Education
Government of Puducherry
Chief Secretariat
Victor Simonel, Street
Puducherry-605001
38. Minister for School Education
Government of National
Capital
Territory of Delhi
Delhi Secretariat
I.P. Estate
New Delhi-110002
- (vi) All members of the Executive
committee not included above;
and
39. (i) Upendra Kushwaha
Minister of State
Department of Education
Ministry of Human
Resource
Development, Shastri
Bhawan
New Delhi- 110001
(up to 11.12.2018)
(ii) Satya Pal Singh
Minister of State
Department of Education
Ministry of Human
Resource Development,
Shastri Bhawan
New Delhi 110001
(from 12.12.2018)
40. Hrushikesh Senapaty
Director
NCERT, New Delhi 110016.



41. Chand Kiran Saluja
Retd. Professor
Sanskrit Promotion
Foundation
Arya Samaj Mandir Bhawan
11204/5, Mandir Marg
Gaushala Marg
Doriwalan, Delhi 110006
42. Madhuree M. Shahane
C-202, DSK Gandhkosh,
Near Jupiter Hospital, Baner,
Pune 411045
43. Murali Monahar Putti
FF2, Shreya's Apt.
Asmanghad
Malakpet, Hyderabad
Telangana 500059
44. B.C. Das Purkayastha
Retd. Prinipal of Pandu College
H.No.21, Ananda Nagar
Lane-3, Adabari
Guwahati, Assam 781012
45. Rakesh Chand Chaturvedi
Teacher
Shriji Baba Saraswati Vidya
Mandir
F-57, Govind Nagar
Near Shri Krishna Janmsthan
Mathura, UP 281001
46. M.P. Devi
Teacher
Vyasa Vidya Peethom
Senior Secondary School
P.O. Kallekkad
District Palakkad
Kerala 678006
47. *Joint Director*
NCERT
New Delhi 110016
48. Jyotsna Tiwari
Head, DEAA
NCERT, New Delhi



- | | | |
|-------|-----|---|
| | 49. | Lalchand Ram, <i>Professor</i>
DEL, NCERT, New Delhi |
| | 50. | Pramod Kumar Dubey
<i>Associate Professor</i>
DEL, NCERT, New Delhi. |
| | 51. | Sanjay Kumar, IAS
<i>Joint Secretary (SE-II)</i>
Ministry of HRD,
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi 110001 |
| | 52. | Darshana M. Dabral
<i>JS and Financial Adviser</i>
Ministry of HRD
(Department of School
Education & Literacy)
Shastri Bhawan,
New Delhi 110001 |
| (vii) | (a) | Chairman
Central Board of
Secondary
Education
Delhi
(ex-officio) |
| | 53. | <i>Chairman</i>
Central Board of Secondary
Education
Shiksha sadan 17
Rouse Avenue, Institutional
Area
Near Bal Bhawan
New Delhi-110001 |
| | (b) | Commissioner
Kendriya Vidyalaya
Sangathan
New Delhi
(ex-officio) |
| | 54. | <i>Commissioner</i>
Kendriya Vidyalaya Sangathan
18, Institutional Area
Shahid Jeet Singh Marg
New Delhi 110016 |
| | (c) | Director
Central Health
Education
Bureau
New Delhi
(ex-officio) |
| | 55. | <i>Director</i>
Central Health Education
Bureau
(DGHS)
Ministry of Health and Family
Welfare
Kotla Road
New Delhi 110002 |



- | | |
|---|--|
| <p>(d) Deputy Director General
Incharge of Agricultural
Education
ICAR, Ministry of
Agriculture
New Delhi
(ex-officio)</p> | <p>56. <i>Deputy Director General</i>
Incharge of Agriculture
Education ICAR
Krishi Anusandhan Bhawan
Pusa
New Delhi 110012</p> |
| <p>(e) Director of Training
Directorate General of
Training and Employment
Ministry of Labour
New Delhi
(ex-officio)</p> | <p>57. Director of Training
Directorate General of Training
and Employment, Ministry of
Labour Employment Exchange
Building, Pusa (ITI) Near
Rajendra Place Metro Station,
Pusa Road
New Delhi</p> |
| <p>(f) Representative of Education
Division Planning
Commission
New Delhi ; and
(ex-officio)</p> | <p>58. Advisor Education
Niti Aayog
Yojana Bhawan
New Delhi 110001</p> |
| <p>(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.</p> | <p>59. Mona Seervai
<i>Principal</i>
Gilbert Building, 2nd X Road
Babulnath road, Mumbai,
Maharashtra 400007</p> <p>60. Anuradha Joshi
<i>Principal</i>
Sardar Patel Vidyalaya
Lodi Estate
New Delhi 110003</p> <p>61. Siddhartha Menon
<i>Principal</i>
Rishi Valley School
Chittoor
Andhra Pradesh-517352</p> <p>62. S. Ajayakumar
<i>Principal</i>
Kendriya Vidyalaya
Pattom, Trivandrum-695004</p> |



- | | |
|-----------------|---|
| | 63. Arindam Mukherjee
<i>Trustee Member-cum-Secretary</i>
Institute of Social and Cultural
Studies
48/2, Dr. Suresh Sarkar Road
Kolkata 700014 |
| | 64. H.C.Verma
<i>Professor</i>
Department of Physics
Indian Institute of Technology
Kanpur
Kalyanpur
Kanpur 208016 |
| Special Invitee | 65. <i>Secretary</i>
Council of Indian School
Certificate Examination
Pragati House, 3rd Floor
47 Nehru Place
New Delhi 110019 |
| Convener | 66. Harsh Kumar
<i>Secretary</i>
NCERT
New Delhi 110016 |



EXECUTIVE COMMITTEE

- | | |
|---|--|
| (i) President of the Council who shall be the ex-officio President of the Executive Committee | 1. Prakash Javadekar
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi 110001 |
| (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) Upendra Kushwaha
Minister of State
Department of Education
Ministry of Human Resource Development, Shastri Bhawan
New Delhi 110001
(up to 11.12.2018)

(ii) Satya Pal Singh
Minister of State
Department of Education
Ministry of Human Resource Development, Shastri Bhawan
New Delhi 110001
(from 12.12.2018) |
| (b) A Deputy Minister of Education nominated by the President of the Council | 3. _____ |
| (c) Director of the Council | 4. Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi-110016 |
| (d) Secretary, Ministry of Education ex-officio | 5. (i) Anil Swarup
<i>Secretary</i>
Department of School Education & Literacy
Ministry of HRD Government of India Shastri Bhawan
New Delhi-110001
(up to 30.06.2018)

(ii) Rina Ray
<i>Secretary</i>
Department of School Education and Literacy
Ministry of HRD Government of India Shastri Bhawan
New Delhi-110001
(from 01-07-2018) |



- | | | | |
|-------|---|-----|---|
| (iii) | Chairman of the University Grants Commission-Member ex-officio | 6. | D.P. Singh
<i>Chairman</i>
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi 110002 |
| (iv) | Six Educationists with known interest in school education (two of whom shall be school teachers) Nominated by the President | 7. | Chand Kiran Saluja
<i>Retd. Professor</i>
Sanskrit Promotion Foundation
Arya Samaj Mandir Bhawan
11204/5, Mandir Marg
Gaushala Marg
Doriwalan
Delhi 110006 |
| | | 8. | Madhuree M. Shahane
C-202, DSK Gandhkosh
Near Jupiter Hospital, Baner
Pune 411045 |
| | | 9. | Murali Monahar Putti
<i>Professor</i>
FF2, Shreya's Apt.
Asmanghad
Malakpet, Hyderabad
Telangana-500059 |
| | | 10. | B.C. Das Purkayastha
<i>Retd. Prinipal</i> of Pandu College
H.No.21, Ananda Nagar
Lane-3, Adabari
Guwahati 781012 Assam |
| | | 11. | Rakesh Chand Chaturvedi
<i>Teacher</i>
Shriji Baba Saraswati Vidya
Mandir
F-57, Govind Nagar
Near Shri Krishna Janmsthan
Mathura (UP 281001 |
| | | 12. | M.P.Devi
<i>Teacher</i>
Vyasa Vidya Peethom
Senior Secondary School
P.O. Kallekkad
District Palakkad
Kerala 678006 |
| (v) | Joint Director of the Council | 13. | <i>Joint Director</i>
NCERT
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. | Jyotsna Tiwari
<i>Head, DEAA</i>
NCERT, New Delhi |
| | | 15. | Lalchand Ram, <i>Professor</i>
DEL, NCERT, New Delhi |
| | | 16. | Pramod Kumar Dubey
<i>Associate Professor</i>
DEL, NCERT, New Delhi |
| (vii) | One representative of the Ministry of Education; and | 17. | Sanjay Kumar, IAS
<i>Joint Secretary (SE-II)</i>
Ministry of HRD,
(Department of School
Education & Literacy)
Shastri Bhawan
New Delhi 110001 |
| (viii) | One representative of the Ministry of Finance, who shall be the Financial Adviser of the Council | 18. | Darshana M. Dabral
<i>JS and Financial Advisor</i>
Ministry of HRD,
(Department of School
Education & Literacy),
Shastri Bhawan
New Delhi 110001 |
| (ix) | Secretary of the Council shall be the Secretary of the Executive Committee | 19. | Harsh Kumar
<i>Secretary</i>
NCERT
New Delhi 110016 |



FINANCE COMMITTEE

The Director of NCERT (ex-officio)	Chairperson	Hrushikesh Senapaty <i>Director</i> NCERT, New Delhi 110 016
Financial Advisor MHRD (ex-officio)	Member	Darshana M. Dabral <i>JS and Financial Advisor</i> Ministry of HRD, (Department of School Education & Literacy) Shastri Bhawan, New Delhi 110001
	Member	Sanjay Kumar, IAS <i>Joint Secretary (SE-II)</i> Ministry of HRD, (Department of School Education & Literacy), Shastri Bhawan, New Delhi 110001
	Member	Amit Cowshish <i>Additional Secretary (Retd.)</i> Ministry of Defence 578, Sector 'A' Pocket 'C' Vasant Kunj New Delhi 110070
	Member	Rakesh Mohan Joshi <i>Professor and Chairperson</i> Indian Institute of Foreign Trade B-21, Qutab Institutional Area New Delhi
Secretary, NCERT	Member Convenor	Harsh Kumar <i>Secretary</i> NCERT New Delhi 110 016



ESTABLISHMENT COMMITTEE

- | | |
|---|--|
| (i) Director of the Council
ex-officio (Chairman) | 1. Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi 110016 |
| (ii) The Joint Director
NCERT, (ex-officio) | 2. <i>Joint Director</i>
NCERT
New Delhi 110016 |
| (iii) A nominee of the
Ministry of Education
to be nominated by the
President,
NCERT | 3. Sanjay Kumar, IAS
<i>Joint Secretary</i> (SE-II)
Ministry of HRD
(Department of School Education
and Literacy)
Shastri Bhawan
New Delhi 110001 |
| (iv) Four educationists to
be nominated by the
President, NCERT of
whom at least one is a
Scientist | 4. Mohammad Akhtar Siddiqui
<i>Professor</i>
174/15, Gaffar Manjil
Jamia Nagar
New Delhi 110025

5. Vinay Kumar Pathak
<i>Vice Chancellor</i>
Dr. A.P.J.Abdul Kalam Technical
University, Lucknow
Uttar Pradesh

6. Dharendra Pal Singh
<i>Director</i>
National Assessment and
Accreditation Council (NAAC)
P. O. Box No. 1075, Nagarbhavi,
Bengaluru 560072, Karnataka

7. R.C. Kuhad
<i>Vice Chancellor</i>
Central University of Haryana
Jant-Pali, Mahendergarh 123029
Haryana |
| (v) One representative
from the Regional
Institute of Education
to be nominated by the
President, NCERT | 8. Nityanand Pradhan
<i>Principal</i>
Regional Institute of Education
Shyamala Hills
Bhopal |



- | | | | |
|--------|--|-----|---|
| (vi) | One representative of the National Institute of Education Delhi to be nominated by the President, NCERT | 9 | A. K. Wazalwar
<i>Head, DEK</i>
NCERT
New Delhi |
| (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 | Harish Kumar Meena
(Elected representative Academic Staff)
DESS, NCERT
New Delhi |
| | | 11 | Ravinder Singh
(Elected representative Non-Academic Staff)
NCERT
New Delhi |
| (viii) | Financial Advisor
NCERT | 12. | Darshana M. Dabral
<i>JS and Financial Advisor</i>
Ministry of HRD
(Department of School Education & Literacy)
Shastri Bhawan,
New Delhi 110 001 |
| (ix) | Secretary, NCERT
Member-convener | 13. | Harsh Kumar
<i>Secretary</i>
NCERT
New Delhi 110016. |



BUILDING AND WORKS COMMITTEE

- | | |
|---|---|
| 1. Director, NCERT
Chairman Ex-officio | Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi 110016 |
| 2. Joint Director, NCERT
Vice-Chairman, Ex-Officio | <i>Joint Director</i>
NCERT, New Delhi 110016 |
| 3. Chief Engineer, CPWD
or his nominee (Member) | Superintending Engineer
DCC XI, CPWD
Room No.127, 1st Floor
A-Wing, Pushpa Bhawan
Madangir
New Delhi |
| 4. A representative of Ministry of
Urban Development (Works) | Director (IFD)
Ministry of Urban Development
Finance Division
Nirman Bhawan
New Delhi- 110 001 |
| 5. The Consulting Architect of
NCERT | Chief Architect (NDR)
C.P.W.D.
303, 'A' Wing
Nirman Bhawan
Maulana Azad Road
New Delhi 110011 |
| 6. Financial Advisor of the Council
or his nominee | Darshana M. Dabral
<i>JS and Financial Advisor</i>
Ministry of HRD
(Department of School
Education & Literacy)
Shastri Bhawan
New Delhi 110 001 |
| 7. A nominee of the Ministry of
HRD | Kumar, IAS
<i>Joint Secretary (SE-II)</i>
Ministry of HRD,
(Department of School
Education & Literacy)
Shastri Bhawan,
New Delhi 110001 |
| 8. A Civil Engineer of standing
(nominated by the President) | Mohan Sakhalkar
<i>Managing Director</i>
Creations Engineers Pvt. Ltd.
RL 168 G Block
Shahunagar, Chinchwad
Pune 411019 |



- | | |
|--|--|
| 9. An Electrical Engineer of standing (nominated by the President) | Sanjay Gandekar
<i>Electrical Engineer</i>
4 Aditya Apartment
127/2, Maha Ganesh Colony
Paud Road, Kothrud
Pune 411029 |
| 10. A Member of Executive Committee (nominated by the President) | Chand Kiran Saluja
<i>Retd. Professor</i>
Sanskrit Promotion
Foundation
Arya Samaj Mandir Bhawan
11204/5, Mandir Marg
Gaushala Marg
Doriwalan
Delhi 110006 |
| 11. Secretary, NCERT | Major Harsh Kumar
<i>Secretary</i>
NCERT
New Delhi 110016 |



PROGRAMME ADVISORY COMMITTEE

- | | | |
|-------|-----------------------|------------------|
| (i) | Director, NCERT | Chairperson |
| (ii) | Joint Director, NCERT | Vice-Chairperson |
| (iii) | Secretary, NCERT | Member |

Five Members Nominated by the President, NCERT

- | | | |
|-------|---|--------|
| (i) | R. Prabhakara Raya
Professor
Department of Management Studies
Pondicherry University, Puducherry | Member |
| (ii) | Suresh Tandon
Former Vice-Chairman
Punjab School Education Board (PSEB)
Vidya Bhawan, Phase-8, S.A.S. Nagar
Mohali 160062 | Member |
| (iii) | Mahesh Chand Sharma
Professor
School of Education
IGNOU, New Delhi | Member |
| (iv) | Shashikala Gulabrao Wanjari
Vice-Chancellor
Shreemati Nathibai Daodar Thackersey
Women's University, (SNDTU), Mumbai | Member |
| (v) | H.C. Verma
Professor of Physics (Retd.)
IIT - Kanpur - Uttar Pradesh | Member |

Five Directors of SIEs and SCERTs Nominated by the President, NCERT as Members

- | | | |
|-------|---|--------|
| (i) | Director
State Council of Educational Research and Training
(SCERT), Uttar Pradesh | Member |
| (ii) | Director
State Council of Educational Research and Training
(SCERT), Uttarakhand | Member |
| (iii) | Director
State Council of Educational Research and Training
(SCERT), Madhya Pradesh | Member |
| (iv) | Director
State Council of Educational Research and Training
(SCERT), Haryana | Member |



- | | | |
|-----|--|--------|
| (v) | <i>Director</i>
State Council of Educational Research and Training
(SCERT), Andhra Pradesh | Member |
|-----|--|--------|

Members from the NCERT

- | | | |
|--------|---|--------|
| (i) | <i>Joint Director</i>
CIET
NCERT, New Delhi | Member |
| (ii) | Rajendra Pal
<i>Professor</i>
CIET
NCERT, New Delhi | Member |
| (iii) | <i>Joint Director</i>
PSSCIVE
Shyamla Hills
Bhopal 462013
Madhya Pradesh | Member |
| (iv) | Mridula Saxena
PSSCIVE
Shyamla Hills
Bhopal 462013
Madhya Pradesh | Member |
| (v) | <i>Principal</i>
Regional Institute of Education
Capt. D.P. Choudhary Marg
Ajmer 305004 (Rajasthan) | Member |
| (vi) | Dean of Instruction
Regional Institute of Education
Capt. D.P. Choudhary Marg,
Ajmer 305004
Rajasthan | Member |
| (vii) | <i>Principal</i>
Regional Institute of Education
Shyamla Hills
Bhopal 462013 | Member |
| (viii) | Dean of Instructions
Regional Institute of Education
Shyamla Hills
Bhopal 462013 | Member |
| (ix) | <i>Principal</i>
Regional Institute of Education
Sachivalaya Marg
Bhubaneswar 751007
Odisha | Member |



(x)	Dean of Instructions Regional Institute of Education Sachivalaya Marg Bhubaneswar - 751007 Odisha	Member
(xi)	<i>Principal</i> Regional Institute of Education Manas Gangotri Mysore - 57006	Member
(xii)	Dean of Instructions Regional Institute of Education Manas Gangotri Mysuru - 57006	Member
(xiii)	<i>Principal</i> North-East Regional Institute of Education Umiam (Ri-Bhoi), Barapani Meghalaya	Member
(xiv)	Dean of Instructions North-East Regional Institute of Education Umiam (Ri-Bhoi), Barapani Meghalaya	Member
(xv)	<i>Head</i> Department of Elementary Education (DEE) NCERT, New Delhi	Member
(xvi)	Suniti Sanwal <i>Professor</i> Department of Elementary Education (DEE) NCERT, New Delhi	Member
(xvii)	<i>Head</i> Department of Education in Languages (DEL) NCERT, New Delhi	Member
(xix)	K.C. Tripathi <i>Professor</i> Department of Education in Languages (DEL) NCERT, New Delhi	Member
(xx)	<i>Head</i> Department of Education of Groups with Special Needs (DEGSN) NCERT, New Delhi	Member
(xxii)	Anita Julka <i>Professor</i> Department of Education of Groups with Special Needs (DEGSN) NCERT, New Delhi	Member



(xxiv)	<i>Head</i> Department of Gender Studies (DGS) NCERT, New Delhi	Member
(xxv)	Mona Yadav <i>Professor</i> Department of Gender Studies (DGS) NCERT, New Delhi	Member
(xxvi)	<i>Head</i> Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
(xxvii)	Gouri Srivastava <i>Professor</i> Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
(xxviii)	<i>Head</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
(xxix)	Sunita Farkya <i>Professor</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
(xxx)	<i>Head</i> RMSA Project Cell NCERT, New Delhi	Member
(xxxi)	Sarad Kr. Pandey <i>Associate Professor</i> RMSA Project Cell NCERT, New Delhi	Member
(xxxii)	<i>Head</i> Educational Survey Division (ESD) NCERT, New Delhi	Member
(xxxiii)	Sridhar Srivastava <i>Professor</i> Educational Survey Division (ESD) NCERT, New Delhi	Member
(xxxiv)	<i>Head</i> Department of Teacher Education (DTE) <i>Professor</i> NCERT, New Delhi	Member
(xxxv)	B.P. Bhardwaj <i>Professor</i> Department of Teacher Education (DTE) NCERT, New Delhi	Member



(xxxvi)	<i>Head</i> Department of Educational Psychology and Foundations of Education (DEPFE) NCERT, New Delhi	Member
(xxxvii)	Prabhat Kr. Mishra <i>Associate Professor</i> NCERT, New Delhi	Member
(xxxviii)	<i>Head</i> Department of Educational Research (DER) NCERT, New Delhi	Member
(xxxix)	N.K. Gupta <i>Professor</i> Department of Educational Research (DER) NCERT, New Delhi	Member
(xl)	<i>Head</i> International Relations Division (IRD) NCERT, New Delhi	Member
(xli)	Chairperson Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xlii)	M. Samantaray <i>Deputy Librarian</i> Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xliii)	<i>Head</i> Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xliv)	Ashita Raveendran <i>Assistant Professor</i> Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xiv)	<i>Head</i> Department of Curriculum Studies (DCS) NCERT, New Delhi	Member
(xlvi)	Anita Nuna <i>Professor</i> Department of Curriculum Studies (DCS) NCERT, New Delhi	Member



(xlvii)	<i>Head</i> Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
(xlviii)	Pawan Sudhir <i>Professor</i> Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
(xlviii)	<i>Head</i> Department of Educational Kits (DEK) NCERT, New Delhi	Member
(xIx)	R.K. Parashar <i>Professor</i> Department of Educational Kits (DEK) NCERT, New Delhi	Member
(I)	<i>Head</i> Publication Division NCERT, New Delhi	Member

Special Invitees

- (i) *Joint Secretary* (Sch-4)
Department of School Education and Literacy
MHRD
Shashtri Bhawan
New Delhi - 110001
- (ii) *Dean* (Academic)
NCERT, New Delhi
- (iii) *Dean* (Research)
NCERT, New Delhi
- (iii) *Dean* (Research)
NCERT, New Delhi
- (iv) *Chief Accounts Officer* (CAO)
NCERT, New Delhi



EDUCATIONAL RESEARCH AND INNOVATIONS COMMITTEE

- | | | |
|-------|--|----------------|
| (i) | H.K. Senapaty
<i>Director, NCERT</i> | Chairperson |
| (ii) | <i>Joint Director</i> | Co-Chairperson |
| (iii) | A.P. Behera
<i>Joint Director, CIET</i> | |
| (iv) | Rajesh Khambayat
<i>Joint Director, PSSCIVE, Bhopal</i> | |

External Members

- (v) T.S. Naidu
Professor-cum-Director
Centre for Social Exclusion & Inclusive Policy
Pondicherry University
Kalapet, Pondicherry 605 014
- (vi) Anil Kumar Gupta
Director
Wadia Institute of Himalayan Geology 33,
Gen. Mahadeo Singh Road
Dehradun 248 001
- (vii) Basuthkar Jagadeeshwar Rao
Senior Professor (I)
Department of Biological Sciences
Tata Institute of Fundamental Research
Homi Bhabha Road
Mumbai- 400 005
- (viii) Vaman Vasudeo Gogate
'Samarth Krupa'
Vidyanagar Lane No. 4
Vishrambag
Sangli 416 415
- (ix) S. Bhaskara
Retd. Principal
House No. 6c-11
Banashankari, 5th Main
Srinidhi Layout, Konankunte PO
Bengaluru 560 062
- (x) Chand Kiran Saluja
Former Associate Professor
Room No. 126 (Old Building)
Central Institute of Education
University of Delhi
Delhi 110 007



- (xi) E. Vayunandan
Vice Chancellor
Yashwantrao Chavan Maharashtra
Open University
Dnyangangotri, Near Gangapur Dam
Nashik 422222
Maharashtra
- (xii) Rashmi S. Chari
Assistant Director — Education
DAV College Managing Committee
Chitra Gupta Road
New Delhi 110 055

Representatives of State Council of Educational Research and Training

- (xiii) *Director*
SCERT, Vidyabhawan, Sector-12
Gandhinagar 382 016, Gujarat
- (xiv) *Director*
SCERT
25/3, Ballygunge Circular Road
Kolkata – 700 019
West Bangal

NCERT Faculty

- (xv) Saroj Bala Yadav
Dean, (Academic)
- (xvi) A.K. Srivastava
Dean, (Research)
- (xvii) B. Barthakur
Principal, NERIE, Umiam
Barapani
Shillong 793013
Meghalaya
- (xviii) Y. Sreekanth
Principal, RIE, Mysuru 570006
Karnataka
- (xix) Dinesh Kumar
Head, DESM
NCERT, New Delhi
- (xx) Manju Bhatt
Head, DESS
NCERT, New Delhi



- (xxi) A.K. Rajput
Head, DEE
NCERT, New Delhi
- (xxii) A.D. Tewari
Head, PMD
NCERT, New Delhi
- (xxiii) Ranjana Arora
Head, DCS
NCERT, New Delhi
- (xxiv) (i) Rajendra Pal
Head, DER
NCERT, New Delhi
(Up to 09/03/18)
- (ii) Anjum Sibia
Head, DER
NCERT, New Delhi
(From 12/03/18)



**ACADEMIC COMMITTEE OF
NATIONAL INSTITUTE OF EDUCATION**

(i) Chairperson

Dean (Academic)
Saroj Bala Yadav

(ii) External Experts

- (i) M.A. Sudhir
Professor Emeritus (UGC)
Gandhigram Rural Institute, Dindigul
Tamil Nadu
- (ii) Ajit K. Mahanty
Professor
HIG-67, Phase VII
Sailashree Vihar
Bhubaneswar-21
- (iii) M.A. Siddiqui
Former Chairperson (NCTE)
Faculty of Education
Jamia Millia Islamia
New Delhi 11025
- (iv) G. Ravindra
Professor
Ex-Joint Director, NCERT
New Delhi
- (v) Venita Kaul
Professor
34, SFS, DDA Flats
Munirka Enclave
New Delhi 110067

(iii) Heads of NIE Departments, Divisions and Cell

- (a) *Head*, Department of Elementary Education (DEE)
- (b) *Head*, Department of Education In Languages (DEL)
- (c) *Head*, Department of Education of Groups with Special Needs (DEGSN)
- (d) *Head*, Department of Gender Studies (DGS)
- (e) *Head*, Department of Education in Social Sciences (DESS)
- (f) *Head*, Department of Education in Science and Mathematics (DESM)
- (g) *Head*, RMSA Project Cell



- (h) *Head*, Educational Survey Division (ESD)
- (i) *Head*, Publication Division (PD)
- (j) *Head*, Department of Teacher Education (DTE)
- (k) *Head*, Department of Educational Psychology and Foundations of Education (DEPFE)
- (l) *Head*, Division of Educational Research (DER)
- (m) *Head*, International Relations Division (IRD)
- (n) *Chairperson*, Library and Documentation Division (LDD)
- (o) *Head*, Planning and Monitoring Division (PMD)
- (p) *Head*, Department of Curriculum Studies (DCS)
- (q) *Head*, Department of Education in Arts and Aesthetics (DEAA)
- (r) *Head*, Division of Educational Kits (DEK)

(iv) Head of the Institutes (CIET and PSSCIVE)

- (a) *Joint Director*, (CIET)
- (b) *Joint Director*, PSSCIVE, Bhopal

(v) Faculty from NIE Departments, Divisions and Cell

- (a) Suniti Sanwal, *Professor*, Department of Elementary Education
- (b) K.C. Tripathi, *Professor*, Department of Education In Languages
- (c) Anita Julka, *Professor*, Department of Education of Groups with Special Needs
- (d) Mona Yadav, *Professor*, Department of Gender Study
- (e) Gauri Srivastava, *Professor*, Department of Education in Social Sciences
- (f) Sunita Farakya, *Professor*, Department of Education in Science and Mathematics
- (g) Sarad Kumar Pandey, *Rashtriya Madhyamik Shiksha Abhiyaan Project Cell*
- (h) Sridhar Srivastava, *Professor*, Educational Survey Division
- (i) B.P. Bhardwaj, *Professor*, Department of Teacher Education
- (j) Prabhat Kumar Mishra, Department of Educational Psychology and Foundations of Education



- (k) A.K. Srivastava, *Professor*, Division of Educational Research
- (l) Indu Kumar, Central Institute of Educational Technology
- (m) Mridula Saxena, *Professor*, PSS Central Institute of Vocational Education, Bhopal
- (n) Moortimattee Samantray, Library and Documentation Division
- (o) Ashita Raveendran, Planning and Monitoring Division
- (p) Anita Nuna, *Professor*, Department of Curriculum Studies
- (q) Pawan Sudhir, *Professor*, Department of Education in Arts and Aesthetics
- (r) R.K. Parashar, *Professor*, Department of Education in Science and Mathematics

(vi) Faculty from Institutes

- (a) Indu Kumar, CIET
- (b) Mridula Saxena, PSSCIVE, Bhopal

(vii) Special Invitees

- (a) *Dean* (Research)
- (b) *Dean* (Coordination)



MANAGING COMMITTEE OF REGIONAL INSTITUTE OF EDUCATION, AJMER

- | | | |
|----|--|---------------|
| 1. | Vice Chancellor
M.D.S. University Ajmer | Chairman |
| 2. | Principal
Regional Institute of Education Ajmer | Vice-Chairman |

A Nominee from the Education Department of Each of States and UTs

- | | | |
|-----|--|--------|
| 3. | Director
Secondary Education
Government of Rajasthan
Bikaner, Rajasthan | Member |
| 4. | Regional Director
Education (South), New Delhi | Member |
| 5. | Director
School of Education
Government of Jammu & Kashmir, Jammu | Member |
| 6. | Director, SCERT
Nishat Ganj, Lucknow, Uttar Pradesh | Member |
| 7. | Joint Director of Higher Education
(C-1), Himachal Pradesh | Member |
| 8. | Director, SCERT
Uttarakhand | Member |
| 9. | Director, SCERT
Punjab | Member |
| 10. | Director, SCERT
Gurugram, Haryana | Member |
| 11. | Director, SCERT
Chandigarh | Member |

Two Experts Nominated by the President, NCERT as Members

- | | | |
|-----|---|--------|
| 12. | R.C Kuhad
Vice Chancellor
Central University of Haryana | Member |
| 13. | V. Ramgopal Rao
Director
IIT Delhi | Member |

Nominee of the Director, NCERT

- | | | |
|-----|---|--------|
| 14. | To be decided on receipt of scheduled date of meeting
of the Managing Committee from the Principal | Member |
|-----|---|--------|



Two Heads of the Departments of RIE Nominated by the Director

- | | | |
|-----|---|--------|
| 15. | <i>Head</i>
Department of Education in Science and Mathematics
RIE, Ajmer | Member |
| 16. | <i>Head</i>
Department of Education
RIE, Ajmer | Member |

Such other member 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 | Member |
|-----|--|--------|



MANAGING COMMITTEE OF REGIONAL INSTITUTE OF EDUCATION, BHOPAL

- | | | |
|----|--|---------------|
| 1. | Vice Chancellor
Barkatulla University
Bhopal | Chairman |
| 2. | Principal
Regional Institute of Education
Bhopal | Vice-Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | | |
|----|---|--------|
| 3. | Director, SCERT
Bhopal, Madhya Pradesh | Member |
| 4. | Director, SCERT
Raipur, Chhattisgarh | Member |
| 5. | Director, MSCERT
Pune, Maharashtra | Member |
| 6. | Director, SCERT
Goa | Member |
| 7. | Director, GCERT
Gandhinagar, Gujarat | Member |
| 8. | Assistant Director of Education
U.T. of Daman and Diu
Daman | Member |
| 9. | Assistant Director of Education
U.T. of Dadar and Nagar Haveli
Silvassa | Member |

Two Experts Nominated by the President, NCERT as Members

- | | | |
|-----|--|--------|
| 10. | Vasudha Kamath
Vice-Chancellor
SNDT Women's University
Mumbai | Member |
| 11. | Geeta Bali
Chairman
NIT Bhopal | Member |

Nominee of the Director, NCERT

- | | | |
|-----|--|--------|
| 12. | To be decided on receipt of scheduled date of
meeting of the Managing Committee from the
Principal | Member |
|-----|--|--------|



Two Heads of the Departments of the Regional Institutes Nominated by the Director

- | | | |
|-----|-----------------------------------|--------|
| 13. | <i>Head</i> , DE
RIE, Bhopal | Member |
| 14. | <i>Head</i> , DESM
RIE, Bhopal | Member |

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
Barkatulla University
Bhopal | Member |
|-----|---|--------|



MANAGING COMMITTEE OF REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

- | | | |
|----|--|---------------|
| 1. | <i>Vice Chancellor</i>
Utakal University
Bhubaneswar | Chairman |
| 2. | <i>Principal</i>
Regional Institute of Education
Bhubaneswar | Vice-Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | | |
|----|--|--------|
| 3. | <i>Director</i>
T.E. and SCERT
President
West Bengal Board of Primary Education
Salt Lake, Kolkata-91 | Member |
| 4. | <i>Principal</i>
State Institute of Education
Port Blair, Andaman & Nicobar Islands | Member |
| 5. | <i>Deputy Director</i>
Directorate of Primary Education
Department of Human Resources Development
Government of Jharkhand
Ranchi | Member |
| 6. | <i>Assistant Director</i>
Directorate of Research and Training
Department of Education
Patna, Bihar | Member |

Two Experts Nominated by the President, NCERT

- | | | |
|----|--|--------|
| 8. | Mohd. Akhtar Siddiqui
<i>Former Chairperson, NCTE</i>
<i>Professor of Education</i>
Institute of Advanced Studies in Education
Faculty of Education, Jamia Millia Islamia
New Delhi | Member |
| 9. | R. V. Rajkumar
<i>Director</i>
IIT, Bhubaneswar | Member |



Nominee of the Director, NCERT

- | | | |
|-----|---|--------|
| 10. | <i>Head</i>
D.E.
RIE, Bhubaneswar | Member |
| 11. | <i>Head</i>
DESM
RIE, Bhubaneswar | Member |

Such other members as are required to be included by the stipulation of the University to which the institute is affiliated

- | | | |
|-----|---|--------|
| 12. | Samson Moharana
<i>Professor</i>
P.G. Department of Commerce
Utkal University
Bhubaneswar | Member |
|-----|---|--------|

The Administrative Officer of the Institute shall act as the Secretary of the Committee as per rule 67(b) of the Rules of the Council.



MANAGING COMMITTEE OF REGIONAL INSTITUTE OF EDUCATION, MYSURU

- | | | |
|----|---|---------------|
| 1. | <i>Vice-Chancellor</i>
Mysore University
Mysuru | Chairman |
| 2. | <i>Principal</i>
Regional Institute of Education
Mysuru | Vice-Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | | |
|----|--|--------|
| 3. | <i>Director</i>
DSCERT
Bengaluru 560085
Karnataka | Member |
| 4. | <i>Director</i>
SCERT, Andhra Pradesh
Opp. L.B. Stadium, E-gate
Hyderabad- 500001 | Member |
| 5. | <i>Director</i>
SCERT, Telangana
Opp. L.B. Stadium, E-gate
O/o the Commission of Agriculture
Hyderabad | Member |
| 6. | <i>Director</i>
SCERT
College Road, DPI Campus
Chennai 600006
Tamil Nadu | Member |
| 7. | <i>Director</i>
SCERT
Vidyabhavan
Poojappura, P.O. Thiruvananthapuram
Kerala 695012 | Member |

Two Experts Nominated by the President, NCERT

- | | | |
|----|--|--------|
| 8. | M. K. Sridhar
Canara Bank School of Management Studies
Post-Graduate Department of Management Studies
Bangalore University, Central College Campus
Bengaluru | Member |
|----|--|--------|



9. Rama Subramaniam
IIT, Bombay
*Coordinator for Research in Science & Technology
in Sanskrit Literature* Member

Nominee of the Director, NCERT

10. To be decided on receipt of scheduled date of meeting of Managing Committee from the Principal Member

Two Heads of the Department of RIE Nominated by the Director

11. *Head* Member
DE
RIE, Mysuru
12. *Head* Member
DESM
RIE, Mysuru

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 Member
Mysore University
Mysuru

The Administrative Officer of the Institute shall act as the Secretary of the Committee as per rule 67(b) of the Rules of the Council.



MANAGING COMMITTEE OF NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM (MEGHALAYA)

- | | |
|---|---------------|
| 1. <i>Vice-Chancellor</i>
North-East Hill University
Shillong | Chairman |
| 2. <i>Principal</i>
NERIE, Umiam
Meghalaya | Vice-Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | |
|---|--------|
| 3. <i>Director</i>
DHRT
Shillong | Member |
| 4. <i>Director</i>
School Education
Itanagar | Member |
| 5. <i>Director</i>
SCERT
Assam | Member |
| 6. <i>Director</i>
HRDD (School Education)
Sikkim | Member |
| 7. <i>Director of School Education</i>
Tripura | Member |
| 8. <i>Director of School Education</i>
Mizoram | Member |
| 9. <i>Director</i>
SCERT
Manipur | Member |
| 10. <i>Director</i>
SCERT
Nagaland | Member |

Two Experts Nominated by the President, NCERT

- | | |
|--|--------|
| 11. Krishna Srivastava
<i>Vice-Chancellor</i>
NEHU, Shillong | Member |
|--|--------|



12. Roze Millia Bethew
Former Chairman
UPSC
Member

Nominee of the Director, NCERT

13. To be decided on receipt of scheduled date of
meeting of Managing Committee from the Principal
Member

Two Heads of the Department of RIE Nominated by the Director

14. *Head*
DESH
NERIE, Umiam
Member
15. *Head*
DE
NERIE, Umiam
Member

Such other members as are required to be included by the stipulation of the University to which the institute is affiliated

16. Nominee of Vice-Chancellor
North-East Hill University
Shillong
Member

The Administrative Officer of the Institute shall act as the Secretary of the Committee as per rule 67(b) of the Rules of the Council.



APPENDIX V

NCERT's Consolidated Sanctioned Strength of Posts as on 31 March 2019 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	674	336	54	16.07%	24	7.14%	26	7.73%	03	0.89%
B	685	380	82	21.57%	43	11.31%	43	11.31%	06	1.57%
C	1474	591	155	26.22%	70	11.84%	70	12.18%	13	2.19%
Total	2833	1307	291	22.26%	137	10.48%	141	10.78%	22	1.68%



NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

Receipts and Payment Account for the year ended 31 March, 2019

Receipts	Current Year 2018-19	Previous Year 2017-18	Payments	Current Year 2018-19	Previous Year 2017-18
1. Opening Balances			1. Expenses		
(a) Cash Balances			(a) Establishment Expenses	2,09,49,94,442	1,61,28,38,486
(b) Bank Balances			(b) Academic Expenses	2,04,73,94,157	2,40,60,88,363
(i) In Current Accounts			(c) Administrative Expenses	1,49,66,50,374	1,33,78,05,752
(ii) In Deposit Accounts			(d) Transportation Expenses	1,33,03,165	1,24,28,616
(ii) In Saving Accounts	1,31,32,57,258	82,73,51,610	(e) Repairs and Maintenance Expenses	32,04,44,093	33,54,98,499
			(f) Prior Period Expenses	-	1,15,30,986
2. Grants Received					
(a) From Government of India	2,83,54,05,000	2,88,71,00,000	2. Payments against Earmarked/Endowment Funds	-	-
(b) From State Government of India	-	-			
(c) From Other Sources (Amount reimbursed from UNFPA/AEP)	5,20,449	75,03,704	3. Payments against Sponsored Projects/ Schemes	19,57,37,366	16,22,84,295
(Grants for capital and revenue exp/ to be shown separately if available)					



					4. Payments against Sponsored Fellowships/Scholarships	81,23,577	83,56,784
3. Academic Receipts	6,92,80,639	2,16,13,285				-	
	-				5. Investments and Deposits made:	-	-
4. Receipts against Earmarked/Endowment Funds					(a) Out of Earmarked/Endowments Funds	-	-
					(b) Out of own funds (Investments-Others)	-	-
5. Receipts against Sponsored Projects/Schemes	19,36,90,405	22,42,33,411				-	-
					6. Term Deposits with Scheduled Banks	6,71,87,30,830	5,56,00,00,000
6. Receipts against sponsored Fellowships and Scholarships	-	-					
					7. Expenditure on Fixed Assets and Capital Works-in-Progress	-	-
7. Income on Investments					(a) Fixed Assets	27,63,86,685	18,58,01,862
(a) Earmarked /Endowment funds					(b) Capital Work-in-Progress	-	-
(b) Other Investments	7,96,69,100	8,56,22,301					
					8. Other payments including statutory payments	64,43,18,817	56,52,35,459
8. Interest received on							
(a) Bank Deposits	25,50,71,679	27,65,90,548			9. Refunds of Grants		



(b) Loans and Advances	30,93,303	28,14,228			
(c) Savings Bank Accounts	4,31,26,106	2,93,37,212	10. Deposits and Advances	66,37,365	5,14,10,227
(d) Bank Guarantees	-	1,90,963			
9. Investments encashed	-	-	11. Other Payments	6,59,11,74,611	4,16,80,79,014
10. Term Deposits with Scheduled Banks encashed	5,41,37,30,830	5,39,68,00,000	12. Closing balances		
			(a) Cash in hand		
11. Other Income (Including Prior Period income)	3,40,01,19,766	3,07,05,54,189	(b) Bank Balances		
			In Current Accounts		
12. Deposits and Advances	88,54,574	4,76,40,195	In Savings Accounts	48,64,11,080	1,31,32,57,258
			In Deposit Accounts		
13. Miscellaneous Receipts including Statutory Receipts	57,93,91,422	68,51,84,940			
14. Any other Receipts	6,70,50,96,031	4,16,80,79,014			
Total	20,90,03,06,562	17,73,06,15,600	Total	20,90,03,06,562	17,73,06,15,600

Sd/-

Sd/-

Chief Accounts Officer
NCERT, New Delhi – 110 016

Secretary
NCERT, New Delhi – 110 016



Annual Report 2018–2019

Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of the National Council of Educational Research and Training (NCERT) for the year ended 31 March 2019

1. We have audited the attached Balance Sheet of the National Council of Educational Research and Training (NCERT) as at 31 March 2019, Income & Expenditure Account and Receipts & Payments Account for the year ended on that date under Section 20 (1) of the Comptroller & Auditor General's (Duties, Powers & Conditions of Service) Act, 1971. The audit has been entrusted for the period up to 2022-23. These financial statements include the accounts of 12 units of the Council. Of these, accounts of 7 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 & 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 misstatements. An audit includes examining, on a test basis, evidences supporting the amounts and disclosure 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, subject to the observation in the report, which to the best of our knowledge and belief were necessary for the purpose of our audit;
 - (ii) The Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report have been broadly drawn up in the format prescribed by the Ministry of Human Resource Development, Government of India.
 - (iii) In our opinion, proper books of accounts and other relevant records 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) — ₹ 161.09 crore**

The above does not include Land and Building owned by Regional Production and Distribution Centre (RPDC), Bengaluru (unit of NCERT). This has resulted in understatement of Fixed Assets and Capital Fund.

A.1.2 Current Assets (Schedule-7) - ₹ 228.87 crore**Cash and Bank Balances: ₹ 48.64 crore**

(a) The above includes closing bank balance of Publication Division of (-) ₹ 13.51 crore (excluding the cash balances of RPDCs and sales counter of Publication division). On examination of Bank reconciliation statement of the Publication division, it was noticed that:

- Amount of ₹ 12.85 crore (Royalty income received from *Director, Elementary Education, Assam* in December 2018 on account of copyrights: ₹ 4.37 crore, Income on account of printing work for CBSE received in September 2018: ₹ 2.48 crore, Advance payment of books by Haryana Government: ₹ 0.87 crore and ₹ 3.59 crore. Other Receipt against sale of books: ₹ 0.93 crore and TDS under GST ₹ 0.61 crore) which was identified as receipts during 2018-19 have not been taken into cashbook due to oversight and remained out of accounts. This has resulted in understatement of Other Income by ₹ 8.32 crore, Current Liabilities by ₹ 4.53 crore and Cash and Bank Balance by ₹ 12.85 crore.
- Credit given by bank but not included in the cash book includes an amount of ₹ 6.56 lakh under the heading Short/Excess details of which is not available with NCERT and an amount of ₹ 6.99 lakh pertaining to the year prior to 2013–14 for which action need to be taken for reconciliation.
- Amount deposited but not credited by bank includes amount of ₹ 45.38 lakh pertaining to sales which has been taken twice in the cashbook resulting in overstatement of Sale and Current Assets- Bank Balances by ₹ 45.38 lakh.
- Amount deposited but not credited by bank includes amount of ₹ 7.21 lakh prior to December 2014.

(b) The above includes closing bank balance of Publication Division of (-) ₹12.26 crore whereas as per the records of Publication Division (including RPDCs and Sales counters) the amount was (-) ₹12.59 crore.

This has resulted in overstatement of Current Assets and Capital Fund by ₹ 33.36 lakh.

B. GPF/CPF Accounts**B.1 Investment— ₹ 132.93 crore**

The above includes investment of ₹ 1.60 crore in bonds of Punjab Financial Corporation (PFC) which have matured on 1/12/2016 but



the amount has not been received. This resulted in overstatement of Investment and understatement of Current Assets by ₹ 1.60 crore. The issue has been pointed out in last two years however no action has been taken in this regard.

B.2 Accrued interest — ₹ 6.50 crore

The above includes accrued interest of ₹ 0.62 crore for the period from December 2016 to March 2018 on investment of ₹ 1.60 crore in PFC bonds though the investment has matured in December 2016. This resulted in overstatement of Accrued Interest and Surplus by ₹ 0.62 crore. The issue has been pointed out in last two years however no action has been taken in this regard.

C. General

C.1 NCERT has maintained separate accounts of GPF. However the assets & liabilities of GPF accounts have been included in the main NCERT accounts in contravention of MHRD format of accounts.

C.2 Bank-Reconciliation Statement

BRS of NCERT Headquarters and Publication unit as on 31.03.2019 revealed following unreconciled amounts:

(Amount in ₹)

S. No.	Bank Account No.	Cheques issued but not cleared (+)	Credit given by bank but not booked in cash book (+)	Cheques deposited but credit not given by bank (-)	Debit raised by bank but not booked in cash book (-)
1.	10137881331 (Hqrs)	-	1,09,97,389	-	-
2.	10137881342 (Publication)	-	10,42,64,715	3,00,03,793	-
Total		-	11,52,62,104	3,00,03,793	-

An amount of ₹ 11.52 crore represents amount credited by bank but not taken in cashbook. This includes ₹ 6.99 lakh pertaining to publication division which was prior to March 2014. Thus, amount of ₹ 11.52 crore has remained out of accounts.

An amount of ₹ 3.00 crore has been shown as cheques deposited but not credited by bank. This includes ₹ 7.21 lakh pertaining to publication division which was prior to December 2014. These cases need investigation with particular emphasis on old cases.

It is evident from above that in many accounts unreconciled amounts exist which are quite old. Therefore, proper action needs to be taken at the earliest to reconcile the same.

C.3 The unutilised grant includes balance of sponsored project. It should be shown separately as prescribed in MHRD format.

D. Grant-in-aid

The Council received grant-in-aid during 2018-19 of ₹ 283.54 crore (Capital: ₹ 25.00 crore and Revenue: ₹ 258.54 crore) out of which grant



of ₹ 51.17 crore (Capital: ₹ 2.08 crore and Revenue: ₹ 49.09 crore) was received in the month of March, 2019. It had an opening balance of ₹ 22.63 crore (Capital: Rs NIL and Revenue: ₹ 22.63 crore). It has its own receipt ₹ 62.01 crore (Capital: Nil and Revenue: ₹ 62.01 crore). It utilised ₹ 354.59 crore (Capital: ₹ 24.57 crore and Revenue: ₹ 330.02 crore) leaving an unspent balance of ₹ 13.59 crore (Capital: ₹ 0.43 crore and Revenue: ₹ 13.16 crore).

It also received grant of ₹ 19.37 crore for sponsored/specific projects from Ministry of Human Resource Development and other agencies during the year and had an opening balance of ₹ 12.82 crore in these projects. Out of the total grant received, ₹ 9.64 crore was received, in the month of March 2019. Out of the total of ₹ 32.19 crore, an expenditure of ₹ 19.57 crore was incurred by the Council during the year on these projects leaving a balance of ₹ 12.62 crore as on 31st March 2019.

E. 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 corrective/remedial action.

- (i) 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.
- (ii) 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 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 for Educational Research and Training, Delhi as at 31 March 2019; and
 - (b) and in so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the CAG of India

Place: New Delhi
Date: 30.11.2018

Additional Deputy CAG
(Central Expenditure)



Annexure to the Separate Audit Report

1. Adequacy of internal audit system

NCERT has an internal audit wing. However, the internal audit system of NCERT needs strengthening as:

- All 12 units were planned for internal audit during the year 2018-19 but no unit was audited.
- Proper follow up action was not taken to get the objections settled as 474 internal audit paras were outstanding as on 31.03.2019.

2. Adequacy of internal control system

The Internal audit system of NCERT is not adequate as:

- Thirty-nine external audit paras in respect of NCERT Headquarters. were outstanding for settlement as on 31.03.2019.
- The cashbook of the Publication division of NCERT has minus balances of ₹ 13.51 crore as on 31 March 2019.
- Huge unreconciled amount in the bank reconciliation statement of the Publication Division of NCERT.
- Fixed asset register of NCERT Headquarters was not maintained in the prescribed format.
- Head-wise ledgers, journals and expenditure control register were not being maintained by PSSCIVE, Bhopal.

3. System of physical verification of fixed assets

- The physical verification of Land and Buildings of NCERT (Headquarters) has been conducted up to October 2017.
- The physical verification of other Fixed Assets of NCERT (Headquarters) has been conducted up to 2016-17.
- Physical verification of fixed assets is not being done regularly by the units of NCERT (PSSCIVE, Bhopal, NERIE Umiam and RIE Ajmer).

4. System of physical verification of inventory

- The physical verification of stationery and consumables for the year 2018-19 has not been done by of NCERT (HQ) and PSSCIVE, Bhopal.
- The physical verification of Books and Paper pertaining to Publication division was conducted up to October 2018 and September 2018 respectively.

5. Regularity in payment of statutory due

As per accounts, no payment over six months in respect of statutory dues was outstanding on 31.03.2019.



Publications Released during the year 2018–2019

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*
- *Ganit*
- *Science*
- *Vigyan*
- *Honeysuckle (English Reader)*
- *A Pact with the Sun*
(English Supplementary Reader)
- *The Earth: Our Habitat*
- *Prithvi: Hamara Aavas*
- *Social and Political Life*
- *Samajik Evam Rajnitik Jeevan*
- *Our Past I*
- *Hamare Ateet 1*

Class VII

- *Vasant 2*
- *Bal Mahabharat Katha*
(Hindi Supplementary Reader)
- *Doorva 2 (Dwitiya Bhasha)*
- *Ruchira Bhag 2*
- *Honeycomb (English Textbook)*
- *An Alien Hand (English Supplementary Reader)*
- *Mathematics*
- *Ganit*
- *Science*
- *Vigyan*
- *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
- Honeydew
- 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
- 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
- Word and Expressions 1 (Work Book in English for Class IX)

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
- 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



- *Shashwati Bhag 1*
 - *Mathematics*
 - *Ganit*
 - *Biology*
 - *JeevVigyan*
 - *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 Kuch 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 Viyavhar*
 - *Political Theory II*
 - *Rajniti Siddhant 2*
 - *Introducing Sociology*
 - *Samajshastra ka Parichay*
 - *Understanding Society*
 - *Samaj Ka Bodh*
 - *Business Studies*
 - *Vyavasaik Adhayan*
 - *Accountancy Part I*
 - *Lekhashastra Bhag I*
 - *Accountancy Part II*
 - *Lekhashastra Bhag 2*
 - *Abhivvyakti Aur Madhyam*
 - *Psychology*
 - *Manovigyan Ka Parichay*
 - *Computers & Communication Technology Part I*
 - *Srijan – I (Textbook in creative writing and translation)*
 - *Living Craft Tradition of India (Textbook in Heritage Crafts)*
 - *The Story of Graphic Design*
 - *Bharatiya Hastakala Ki Paramparayen*
 - *Computer and Communication Technology Part II*
 - *Exploring the Craft Tradition in India*
 - *Graphic Design Ekkahani*
 - *Bharatiya Hastakala Paramparaon ki Khoj*
 - *Computer Aur Sanchar Pradyogiki Bhag I*
 - *An Introduction to Indian Art*
 - *Computer Aur Sanchar Pradyogiki Bhag II*
 - *Human ecology and family sciences part I*
 - *Human ecology and family sciences part II*
 - *Manav Paristhitiki evam Parivar Vigyan Bhag I*
- 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*
- *Shashwati Bhag 2*
- *Mathematics Part I*
- *Mathematics Part II*
- *GanitBhag I*
- *GanitBhag II*
- *Biology*
- *JeevVigyan*
- *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 Kuch Vishay Bhag 1*
- *Bharatiya Itihas Ke Kuch Vishay Bhag 2*
- *Bharatiya Itihas Ke Kuch 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*
- *Samkaleen 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 Sansthayen Evam Sanjhedari Khatey*
- *Accountancy II: Company Accounts and Analysis of Financial Statements*
- *Lekhashastra 2: Company Khate Evam Vittiya Viuronon Ka Vishleshan*
- *Psychology*
- *Manovigyan Ka Prichay*
- *Accountancy — Computerised Accounting System*
- *Craft Tradition of India Textbook in Heritage Craft*
- *Graphic Design*
- *Srijan – 2 Textbook in creative writing and translation*
- *Towards a New Age of Graphic Design*
- *Human ecology and family sciences part I*
- *Human ecology and family sciences part II*
- *Manav Paristhitiki evam Parivar Vigyan Bhag I,*

URDU TEXTBOOKS

Class I

- *Riyazee Ka Jadoo 1*
- *Ibtedai Urdu 1*



Class II

- *Riyazee Ka Jadoo 2*
- *Ibtidai Urdu 2*

Class III

- *Riyazee Ka Jadoo 3*
- *Aas Pass (EVS)*
- *Ibtidai Urdu 3*

Class IV

- *Riyazee Ka Jadoo 4*
- *Ibtidai Urdu 4*
- *Aas Pass (EVS)*

Class V

- *Riyazee Ka Jadoo 5*
- *Ibtidai Urdu 5*
- *Aas Pass (EVS)*

Class VI

- *Apni Zaban I*
- *Urdu Guldasta (Supplementary Reader)*
- *Hisab*
- *Science*
- *Zameen Hamara Maskan*
- *Hamare Maazee I*
- *Samaji Aur Siyasi Zindgi I*
- *Jaan Pehchan (Second Language)*

Class VII

- *Apni Zaban 2*
- *Urdu Guldasta (Supplementary Reader)*
- *Hisab*
- *Science*
- *Hamare Maazee II*
- *Samaj Aur Siyasi Zindgi*
- *Jaan Pehchan, Second Language Urdu Textbook*
- *Door – Pass (III language)*

Class VIII

- *Apni Zaban*
- *Urdu Guldasta (Supplementary Reader)*
- *Science*

- *Hisab*
- *Wasail Aur Taraqqi (Geography)*
- *Samaji Aur Siyasi Zindgi*
- *Hamare Maazee 3 Part I*
- *Hamare Maazee 3 Part II*
- *Jaan Pehchan (Second Language)*
- *Door Pass (Third Language)*

Class IX

- *Nawa-e-Urdu*
- *Gulzar-e-Urdu (Supplementary Reader)*
- *Riyazee*
- *Science*
- *Jamhoori Siyasat I*
- *Asri Hindustan I*
- *Hindustan Aur Asri Duniya I*
- *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 II*
- *Jamhoori Siyasat II*
- *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 I*
- *Tabiyat Part II*
- *Shumariyaat Barai Mashiyat*
- *Hindustani Tabai Mahaul*
- *Hindustan Ki Maashi Taraqqi*



- *Samajiyat Ka Taruf*
- *Hindustani Aain-Usool Aur Kam*
- *Siyasi Nazaryah*
- *Karobari Uloom*
- *Nafsiyat Ka Taruf*
- *Tabai Jugraphiya Ke Mubodiyat*
- *Jugraphiya Mein Amlī Kam*
- *Tareekh-e-Alam per Mabni Mauzuat (History)*
- *Samajiyat Ka Taruf*
- *Mutala-e-Muashira*
- *Keemiya Part I*
- *Keemiya Part II*
- *Hayatiyat Part I*
- *Hayatiyat Part II*
- *Khatadari Part I*
- *Khatadari Part II*
- *Dhanak (Supplementary Reader)*
- *Nai Awaz (Core Urdu Textbook)*

Class XII

- *Gulistan-e-Adab*
- *Khyaban-e-Urdu (Supplementary Reader)*
- *Riyazee Part I*
- *Riyazee Part II*
- *Tabiyat Part I*
- *Tabiyat Part II*
- *Keemiya Part I*
- *Keemiya Part II*
- *Hayatiyat*
- *Tareekh-e-Hind Ke Mouzuat Part I*
- *Tareekh-e-Hind Ke Mouzuat Part II*
- *Tareekh-e-Hind Ke Mouzuat Part III*
- *Khatadari Part I*
- *Khatadari Part II*
- *Kulli Mashiyat Ka Taruf*
- *Juzvi Mashiyat Ka Taruf*
- *Dhanak (Supplementary Reader)*
- *Insani Jughrafiya Ke Bunyadi Usool*
- *Jughrafiya Mein Amlī 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 I*
- *Karobari Uloom Part II*
- *Nafsiyat*
- *Nai Awaz (Core Urdu Textbook)*
- *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 AND MONOGRAPHS

- *Manual of Higher Secondary Biology Laboratory Kit*
- *Prayogshala Pustika, Madhyamik Istar, Ganit*
- *Pariyojna Pustika, Paryavaran Karen, Sikhen aur Batayen, Kaksha – VII*
- *Satrangī Gend*
- *Pariyojna Pustika, Paryavaran Karen, Sikhen aur Batayen, Kaksha – VI*
- *Organic Farming, Class VI – VIII*
- *Padhna Sikhane ki Shuruaat*
- *Best of All (Children's Literature Series)*
- *Grumpy Geeta (Children's Literature Series)*
- *A Gajra for Amm (Children's Literature Series)*
- *Lazy Juju (Children's Literature Series)*
- *Ducky Little (Children's Literature Series)*
- *Swine Flue*



- *Fire and Stampede*
- *The Baby Buls (Children's Literature Series)*
- *Chandu's Chaat (Children's Literature Series)*
- *Hello Rain (Children's Literature Series)*
- *Catch Me (Children's Literature Series)*
- *Knock Knock (Children's Literature Series)*
- *Lonely Goldy (Children's Literature Series)*
- *Go Green (Children's Literature Series)*
- *The Kite (Children's Literature Series)*
- *The Three Rabbits (Children's Literature Series)*
- *Amman Hum Bhi Sath Chalen*
- *Bahadur Dost (Pathya Parichay Pustak Mala)*
- *Satranig Gend (Pathya Parichay Pustak Mala)*
- *Ghar ki Khoj*
- *Chidiyaghar ki Sair (Pathya Parichay Pustak Mala)*
- *Tota aur Billi (Pathya Parichay Pustak Mala)*
- *Firki Bachchon Ki, Ank – 10*
- *Resource Package for Awareness in Early Childhood Care and Education (ECCE) Manual*
- *The baby Bulbuls*
- *Catch Me (Children's Literature Series)*
- *Lazy Juju (Children's Literature Series)*
- *Go Green (Children's Literature Series)*
- *Best of All (Children's Literature Series)*
- *Ducky Little (Children's Literature Series)*
- *The Three Rabbits (Children's Literature Series)*
- *May be It Is (Children's Literature Series)*
- *Lonely Goldy (Children's Literature Series)*
- *The Kite (Children's Literature Series)*
- *A Gajra for Amma (Children's Literature Series)*
- *Grumpy Geeta (Children's Literature Series)*
- *Urdu ka Shabd Kosh Vidyalayon ke liye (Tribhashi)*
- *Raindrops, User's Manual English Language Learning Kit*
- *Manual of Microscale Chemistry Laboratory Kit, Class XI – XII*
- *Joy of Theatre, Teacher's Handbook, Class VI – VIII *
- *Ways of Peace (A Resource book for Teachers)*
- *Manual of Higher Secondary Mathematics Kit*
- *Manual of Mathematics Teaching Aids for Primary Schools*
- *Sanskrit Wadmay mein Vigyan ka Itihas*
- *Purv Prathamik Shiksha – Ek Parichay*
- *Yoga – Madhyamik Istar*
- *India : Unity in Cultural Diversity*
- *Yoga – Uchcha Prathamik Istar*
- *Yoga – Upper Primary Stage*
- *Yoga – Secondary Stage*
- *Mathematics Learning Kit, Class I & II User's Manual*
- *Little Steps, A Manual for Pre-school Teachers*
- *Bhasha Shikshan Hindi , Bhag – I, (Dwivarshiya B.Ed.)*
- *Vigyan Shiksha Shastr, B.Ed. Pathyakram ke liye Bhag – I, Bhoutik Vigyan*
- *Readiness Activities for Beginners, Book – I, Class for Primary Stage*
- *Manual of Higher Secondary Biology Laboratory Kit*



- *Manual of Secondary Science Kit, Class IX and X*
- *Har Bachcha Aham Gunvattapuran Prarambhik Balyavastha Shiksha Par Ek Hastapustika*
- *Manual of Microscale Chemistry Laboratory Kit, Class XI and XII*
- *Manual for Secondary Mathematics Kit*
- *Manual for Higher Secondary Mathematics Kit*
- *Manual of Higher Secondary Physics Laboratory Kit, Class XI and XII*
- *School Samajikaran evam Asmita, B.Ed.*
- *Ganit Strot Pustika, Kaksha 1 aur 2*
- *Kala Shiksha par Prashikshan Package, Prathamik Shikshko ke liey (Khand – I)*
- *Kala Shiksha par Prashikshan Package, Prathamik Shikshko ke liey (Khand – II)*
- *Veer Gatha (Urdu)*
- *Women of North East India, Making a Difference*
- *Manual of Higher Secondary Biology Laboratory Kit, XI – XII*
- *Manual of Higher Secondary Physics Laboratory Kit, XI – XII*
- *Manual of Upper Primary Mathematics Kit*
- *Manual of Microscale Chemistry Laboratory Kit, Class XI – XII*
- *Laboratory Manual Chemistry, Class – XII*
- *Laboratory Manual Physics, Class – XI*
- *Prayogshala Pustika Rasayan, Kaksha – XI*
- *Prayogshala Pustika Bhoutiki, Kaksha – XI*
- *Laboratory Manual, Biology, Class – XI*
- *Prayogshala Pustika, Vigyan, Uchch Prathamik Istar, Kaksha VI–VIII*
- *Prayogshala Pustika, Bhoutiki, Kaksha XII*

TEXTBOOKS FOR OPTIONAL SUBJECT

- *Science : Exemplar Problems, Class – VI*
- *Science : Exemplar Problems, Class – VII*
- *Mathematics : Exemplar Problems, Class – VII*
- *Laboratory Manual Science , Class VI – VIII*

TEACHERS GUIDE

- *Shikshak Sandarshika, Shiksha ka Adhikar Adhinyam ke Antargat Bachchon ki Aayu ke anusar Kaksha mein Prevesh Hetu*
- *Sangeet, Shikshak Sandarshika, Uchch Prathamik Istar VI – VIII*
- *Ganit Adhigam Kit, Adhyapak Sandarshika, Kaksha 1 Aur 2*
- *Handbook on Understanding Science through Activities Games and Toys*

SUPPLEMENTARY READER

- *Anne Besant*
- *Bhai Sahab*
- *Simmi's Journey Towards Cleanliness*
- *Bul Bul Baya aur Unke Dost*
- *Bahurupi Gandhi*
- *Discovered Questions*
- *Khoje Huye Prashn*
- *Sarojini Naidu*
- *Hamara Adbhut Vayumandal ab Maila Kyon ?*
- *Bharat Mein Chini Yatri*
- *Samudra Kuber Ka Bhandar*
- *Rui se Nailon Tak*
- *Azadi ki Ladai Ka Sapna*



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
- Mausie 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
- Mili ki cycle
- Paka Aam
- Gehoon
- Bhutta

VOCATIONAL EDUCATION BOOKS

- Assistant Beauty Therapist (Job Role) Textbook for Class IX
- Solanaceous Crop Cultivator (Job Role) Textbook for Class IX
- Cashier (Job Role) Textbook for Class IX
- Store Operations Assistant (Job Role) Textbook for class IX
- Vision Technician (Job Role) Textbook for class IX
- Hand Embroiderer (Addawala) (Job Role) Ref.Id.AMH./ 1010
- Hand Embroiderer (Job Role) Ref. Id.AMH/Q1001
- Animal Health Worker (Job Role) Qualification Pack : AGR/Q4804
- Floriculturist (Protected Cultivation) (Job Role) Ref. Id.AGR./Q0702, Class XI
- Plumber (General) (Job Role) Ref. Id.PSC/Q0104, Class IX
- Floriculturist (Open Cultivation) (Job Role) Ref. Id.AGR./Q0701, Class XI
- General Duty Assistant (Job Role) Ref. Id.HSS/Q5101, Class XI
- Employability Skills, Class IX
- Domestic Data Entry Operator (Job Role), Ref.Id.SSC/Q2212, Class IX
- Dairy Farmer – I (Job Role) Ref. Id. AGR/Q4101
- Unarmed Security Guard (Job Role) Ref. Id. MEP/Q7101

UNPRICED PUBLICATIONS

- Kala Utsav : 2017 A Report
- Shiksha mein Gunvatta Sanvardhan hetu Modules (Prashikshan Samgri)
- 45th JLNSME Exhibition for Children – 2018 List of Exhibits (Bilingual)
- 45th JLNSME Exhibition for Children – 2018, Structure & working of Exhibition (Bilingual)



- 46th JNNSMEEC – 2019, Guidelines
- Kala Utsav 2018: Disha Nirdesh
- Checklist, NCERT General Publications
- Checklist, NCERT Textbook Publications
- NCERT Annual Report 2017-18
- NCERT Varshik Report 2017-18
- NCERT Annual Accounts 2017-18
- NCERT Varshik Lekha 2017-18_

JOURNALS

- *Journal of Indian Education*, Vol. XLII, February 2017
- *Journal of Indian Education*, No., May 2017
- *Journal of Indian Education*, No.2, August 2017
- *Journal of Indian Education*, No.3, November 2017
- *Bhartiya Adhunik Shiksha*, Ank 4, April 2017
- *Bhartiya Adhunik Shiksha*, Ank

- 2, October 2017
- *Bhartiya Adhunik Shiksha*, Ank 3, January 2018
- *Bhartiya Adhunik Shiksha*, Ank 1, July 2016
- *Bhartiya Adhunik Shiksha*, Ank 4, April 2018
- *Indian Education Review* Vol.54, No.02, July 2016
- *Indian Education Review* Vol.55, No.01, January 2017
- *Indian Education Review* Vol.55, No.02, July 2017
- *Prathmik Shikshak*, Ank 3, July 2017
- *Prathmik Shikshak*, Ank 4, October 2017
- *Prathmik Shikshak*, Ank 1, January 2018
- *Prathmik Shikshak*, Ank 2, April 2018
- *School Science* Vol. 52, No.2, June 2014



APPENDIX VIII

Publication Division and its Regional Production-cum-Distribution Centres

S. No.	Name of the Centre	Regions Covered
1.	Publication Division NCERT Campus Sri Aurobindo Marg New Delhi-110016 Phone: 011-26562708 Fax : 011-26851070 email : cbm.ncert@nic.in	Foreign Countries, Delhi, Parts of Rajasthan, Jammu and Kashmir, Uttrakhand, Haryana, Uttar Pradesh, Punjab, Chandigarh, Himachal Pradesh, and Urdu Academy, Delhi
2.	Regional Production-cum-Distribution Centre, Publication Division, NCERT C/o Navjivan Trust Building P.O. Navjivan Ahmedabad - 380 014 Phone : 079-27541446	Gujarat, Madhya Pradesh Chhattisgarh, Maharashtra, and Parts of Rajasthan
3.	Regional Production-cum-Distribution Centre, Publication Division, NCERT 108, 100 Ft. Road Hoskere Halli Extension Banashankari 3rd Stage Bengaluru-560 085 Phone : 080-26725740	Tamil Nadu, Puducherry Kerala, Andhra Pradesh Karnataka, Lakshadweep, Minicoy and Amindivi Islands
4.	Regional Production-cum-Distribution Centre, Publication Division, NCERT CWC Campus (1st Floor) Kishori Mohan Banerjee Road Opp. Dhankal Bus Stop P.O. Panihati Kolkata-700 114 Phone : 033-25530454	West Bengal, Bihar Jharkhand, Odisha, Andaman and Nicobar Islands, and Sikkim
5.	Regional Distribution Centre NCERT, CWC Godown Maligaon, Guwahati-781 011 Phone : 0361-2674869	North-Eastern States



NCERT Constituents and Faculty

A. NATIONAL INSTITUTE OF EDUCATION (NIE)

1. DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)

Professor

- (i) Jyotsna Tiwari, Head
- (ii) Pawan Sudhir

Assistant Professor

- (iii) Sarvari Banerjee

2. DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

Professors

- (i) Suniti Sanwal, *Head*
- (ii) A.K. Rajput
- (iii) Usha Sharma
- (iv) Sandhya Sangai
- (v) V.P. Singh
- (vi) Padma Yadav
- (vii) Kavita Sharma

Associate Professor

- (viii) Vardha Mohan Nikalje

Assistant Professor

- (ix) Romila Soni
- (x) Sarla Kumari Verma
- (xi) Reetu Chandra
- (xii) Ramesh Kumar

Headmistress

- (xiii) Jyoti Kant Prasad

Nursery Teacher

- (xiv) Sunayana Mittal
- (xv) Poonam

3. DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)

Professor

- (i) S.C. Chauhan, *Head*
- (ii) Anita Julka
- (iii) Anupam Ahuja
- (iv) Vinay Kumar Singh



Associate Professor

- (v) Bharti

4. DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATION OF EDUCATION (DEPFE)

Professor

- (i) A.K. Srivastava, *Head & Dean Research*

Associate Professor

- (ii) Prabhat Kumar Mishra

Assistant Professor

- (iii) Shradha Dilip Dhiwal
- (iv) Sushmita Chakraborty
- (v) Ruchi Shukla
- (vi) Deepmala

5. DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS (DESM)

Professors

- (i) Dinesh Kumar, *Head*
- (ii) Sunita Farkya
- (iii) R.K. Parashar
- (iv) Alka Mehrotra
- (v) Anjani Kaul
- (vi) Shashi Prabha
- (vii) Rachna Garg

Associate Professors

- (viii) Gagan Gupta
- (ix) Til Prasad Sarma
- (x) Ruchi Verma
- (xi) Chochong Vareichung Shimray

Assistant Professors

- (xii) Pushplata Verma
- (xiii) Rejaul Karim Barbhuiya
- (xiv) Ashish Kumar Srivastava
- (xv) Pramila Tanwar

6. DEPARTMENT OF EDUCATION IN SOCIAL SCIENCE (DESS)

Professors

- (i) Gauri Srivastava, *Head*
- (ii) Saroj Bala Yadav, *Dean Academic*
- (iii) Neerja Rashmi
- (iv) P.K. Mandal
- (v) Shipra Vaidya



- (vi) Aparna Pandey
- (vii) Shankar Sharan

Associate Professors

- (viii) Seema Shukla Ojha
- (ix) Tannu Malik
- (x) Jaya Singh
- (xi) M.V. Srinivasan

Assistant Professors

- (xii) Harish Kumar Meena
- (xiii) Bijaya Kumar Malik

7. DEPARTMENT OF EDUCATION IN LANGUAGE (DEL)

Professors

- (i) Sandhya Singh, *Head*
- (ii) K.C. Tripathi
- (iii) Mohd. Faruq Ansari
- (iv) Sanjay Kumar Suman
- (v) Mohd. Moazzamuddin
- (vi) Diwan Hannan Khan
- (vii) Sandhya Rani Sahoo
- (viii) Jatindra Mohan Mishra
- (ix) Lalchand Ram

Associate Professor

- (x) R. Meghanathan
- (xi) Chaman Ara Khan
- (xii) Naresh Kohli
- (xiii) Meenakshi Khar
- (xiv) Pramod Kumar Dubey

Assistant Professors

- (xv) Neelkanth Kumar

8. DEPARTMENT OF GENDER STUDIES (DGS)

Professor

- (i) Mona Yadav, *Head*
- (ii) Poonam Agarwal
- (iii) Mily Roy Anand

9. DEPARTMENT OF TEACHER EDUCATION (DTE)

Professor

- (i) Rajrani, *Head*
- (ii) Braham Prakash Bhardwaj
- (iii) Kiran Walia
- (iv) Madhulika S. Patel

Assistant Professor

- (v) K. Vijayan
- (vi) Jitender Kumar Patidar



10. DEPARTMENT OF CURRICULUM STUDIES (DCS)

Professor

- (i) Ranjana Arora, *Head*
- (ii) Anita Nuna
- (iii) Kirti Kapur

Assistant Professor

- (iv) R.R. Koirang
- (v) M.V.S.V. Prasad

11. PUBLICATION DIVISION (PD)

Professor

- (i) M. Siraj Anwar, *Head*
- (ii) Gautam Ganguly, *Chief Business Manager* (till 31st January 2019)
- (iii) Shveta Uppal, *Chief Editor*
- (iv) Arun Chitkara, *Chief Production Officer*
- (v) Abinash Kullu, *Chief Business Manager* (1st February to 31st March 2019)

12. LIBRARY AND DOCUMENTATION DIVISION (LDD)

- (i) Saroj Bala Yadav, *Head*

13. INTERNATIONAL RELATIONS DIVISION (IRD)

Professor

- (i) Pratyusha Kumar Mandal, *Head*

14. PLANNING AND MONITORING DIVISION (PMD)

Professor

- (i) A.D. Tiwari, *Head*

Assistant Professor

- (ii) Ashitha Raveendran
- (iii) P.D. Subhash

15. DIVISION OF EDUCATIONAL RESEARCH (DER)

Professor

- (i) Anjum Sibia, *Head*
- (ii) N.K. Gupta

16. EDUCATION SURVEY DIVISION (ESD)

Professor

- (i) Indrani Bhaduri, *Head*
- (ii) Sridhar Srivastava, *Dean Co-ordinator*
- (iii) Veerpal Singh

Associate Professor

- (iv) Pratima Kumari



Assistant Professors

- (v) Vishal D. Pajankar
- (vi) Sukhwinder
- (vii) Satya Bhushan
- (viii) Gulfam

17. DIVISION OF EDUCATIONAL RESEARCH (DEK)**Professor**

- (i) A.K. Wazalwar, *Head*

18. RMSA PROJECT CELL**Professor**

- (i) Sharad Sinha, *Head*

Assistant Professor

- (ii) S.K. Pandey
- (iii) K.V. Sridevi

B. CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)**Professor**

- (i) A.P. Behera, *Joint Director*
- (ii) Rajendra Pal

Associate Professor

- (iii) Indu Kumar
- (iv) Rajesh Kumar Nimesh

Assistant Professor

- (v) Ranjan Biswas
- (vi) Angel Rathnabai
- (vii) Mohd. Mamur Ali
- (viii) Abhay Kumar

C. PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION (PSSCIVE), BHOPAL**Professors**

- (i) Rajesh P. Khambayat, *Joint Director*
- (ii) Mridula Saxena
- (iii) R.K. Shukla
- (iv) Saurabh Prakash
- (v) V.S. Mehrotra
- (vi) Abhijit Nayak
- (vii) Pinki Khanna
- (viii) A. Palanivel

Associate Professor

- (ix) Vipin Kumar Jain
- (x) Kuldeep Singh
- (xi) P.Veeraiah
- (xii) Deepak Shudhalwar



Assistant Professor

(xiii) Uadal Singh

D. REGIONAL INSTITUTES OF EDUCATION

1. RIE, AJMER

Professor

- (i) SV. Sharma , *Principal In-charge*
- (ii) G. Vishwanathappa
- (iii) K.B. Rath
- (iv) Jyoti Prakash Bagchi
- (v) Satya Vir Sharma
- (vi) Vijay Pal Singh
- (vii) Saryug Yadav
- (viii) Rajesh Mishra
- (ix) Nagendra Singh
- (x) Praveen Kumar Chaurasia
- (xi) Konduru Chandrasekhar

Associate Professr

- (xii) Ram Niwas
- (xiii) Albert Horo
- (xiv) Ayushman Goswami
- (xv) Ram Babu Pareek

Assistant Professor

- (xvi) Anand Kumar Arya
- (xvii) Anil Kumar Nainawat
- (xviii) Rana Pratap
- (xix) Om Prakash Meena
- (xx) Rajendra Kumar Sharma
- (xxi) Meenakshi Meena
- (xxii) Ashvini Kumar Gupta
- (xxiii) Ved Prakash Arya
- (xxiv) Jai Prakash Narayan
- (xxv) Muzammil Hasan
- (xxvi) Patanjali Sharma
- (xxvii) Rajiv Ranjan

Deputy Librarian

(xxviii) Balendu Kumar Jha

Headmaster

(xxix) Digvijay Narayan Pandey

2. RIE, BHOPAL

Professor

- (i) Nityanand Pradhan, *Principal*
- (ii) V.K. Kakaria
- (iii) Jaydeep Mandal
- (iv) P. Kulshreshtha



- (v) I.B. Chugtei
- (vi) B. Ramesh Babu
- (vii) Ratnamala Arya
- (viii) Nidhi Tiwari
- (ix) Lallan Kumar Tiwary

Associate Professor

- (x) Chitra Singh
- (xi) Rashmi Singhai
- (xii) Sanjay Kumar Pandagale
- (xiii) Sudhakar G. Wadekar
- (xiv) Sarika C. Saju

Assistant Professor

- (xv) Ashwini Kumar Garg
- (xvi) R.P. Prajapati
- (xvii) Rashmi Sharma
- (xviii) Daksha M. Parmar
- (xix) Aji Thomas
- (xx) Kalpana Maski
- (xxi) Lokendra Singh Chauhan
- (xxii) Shivalika Sarkar
- (xxiii) N.C. Ojha
- (xxiv) Saurabh Kumar
- (xxv) Suresh Makwana
- (xxvi) Rizvanul Hague
- (xxvii) Vanthangpui Khobung
- (xxviii) Shruti Tripathi
- (xxix) Soyhunlo Sebu
- (xxx) Sangeeta Pethiya

Deputy Librarian

- (xxxi) P.K. Tripathy

Headmaster

- (xxxii) Harish Prasad, *Headmaster*

3. RIE, BHUBANESWAR

Professor

- (i) P. C. Agarwal, *Principal*
- (ii) B.N. Panda
- (iii) S.P. Mishra
- (iv) I.P. Gowramma
- (v) Anoop Kumar
- (vi) P.C. Acharya
- (vii) R. Das
- (viii) M.K. Satapathy
- (ix) M. Goswami
- (x) A.K. Mohapatra
- (xi) Madhuri Mohapatra



- (xii) S.K. Dash
- (xiii) D.L. Dash
- (xiv) B. K. Parida
- (xv) Ch. A. Ramulu

Associate Professor

- (xvi) Laxmidhar Behera
- (xvii) R.K. Mohalik
- (xviii) N. Chhotray
- (xix) S. Das

Assistant Professor

- (xx) Elizabeth Gangmei
- (xxi) Rashmirekha Sethy
- (xxii) Dhanya Krishnan
- (xxiii) K. Ketaki
- (xxiv) Debabrata Bagui
- (xxv) A.K. Saha
- (xxvi) Saurabh Kapoor

Deputy Librarian

- (xxvii) P.L. Negi

Headmaster

- (xxviii) Akhileshwar Mishra

4. RIE, MYSURU

Professor

- (i) Y. Sreekanth, *Principal*
- (ii) S. Ramaa
- (iii) C.G. Venkatesha Murthy
- (iv) G.V. Gopal
- (v) D. G. Rao
- (vi) Manjula P. Rao
- (vii) Malli Gandhi
- (viii) M.U. Paily
- (ix) Geetha G. Nair
- (x) A. Sukumar
- (xi) C. Padmaja
- (xii) Ramadas V.
- (xiii) Kalpana Venugopal
- (xiv) K. Anil Kumar
- (xv) V.S. Prasad

Associate Professor

- (xvi) M.S. Srimathi
- (xvii) P.R. Harinath
- (xviii) V. Prasad
- (xix) P. Tamil Selvan
- (xx) R. Ravi Chandrana



Assistant Professor

- (xxi) Vareishang Tangpu
- (xxii) Karunakaran B. Shaji
- (xxiii) Shivanand Chinnappanvar
- (xxiv) T.V. Somashekar
- (xxv) Rani Prameela
- (xxvi) Sujatha B. Hanchinalkar
- (xxvii) V. Chandranna
- (xxviii) Raman Namboodiri C. K.
- (xxix) Santosh Kumar
- (xxx) Madu B.
- (xxxi) K Suresh Kumar
- (xxxii) Sarvesh Mourya

Deputy Librarian

- (xxxiii) S. Nagaraja

Headmaster

- (xxxiv) T. Hanumanthaiah

5. NERIE, UMIAM (MEGHALAYA)**Professor**

- (i) B. Barathakur, *Principal*
- (ii) Subhas Chandra Roy
- (iii) B. R. Dkhar

Associate Professor

- (iv) Shatarupa Palit
- (v) Ph. Brajayanti Devi
- (vi) F. G. Dkhar

Assistant Professor

- (vii) Anand Valmiki
- (viii) R. A. Singh
- (ix) T. Newmei
- (x) M. G. Wallang
- (xi) P. Ghildyal
- (xii) T. Dey
- (xiii) Sima Saigal
- (xiv) Ch. S. Devi
- (xv) B. Kharlukhi
- (xvi) A. Sen
- (xvii) Umesh Kr. Sharma
- (xviii) Seema R.



विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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