

NCERT Annual Report 2019–2020



N C E R T

Annual Report 2019–2020

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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

February 2021

Magha 1942

PD ???

© ***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

.....

Foreword

It is my privilege to present the journey of National Council of Educational Research and Training (NCERT) for the year 2019-20, wherein we conquered new heights by imparting one of the world's largest capacity building programme for teachers and school heads at the elementary level across the country. Facilitating and conducting research in priority areas of school and teacher education, enhancing support mechanisms to reach out to the states/UTs, developing curricular materials, nurturing the intellectual potential of our children and organizing capacity-building programmes, lies at the very heart of NCERT's mandate.

During the year, apart from its regular publications and journals, the Council brought out Curriculum and Guidelines for the preschool education, *Art Integrated Learning: Guidelines for Elementary Level of School Education*, *Learning outcome for Secondary Stage*, Guidelines on Diploma in Vocational Education and Training (DVET), Framework on vocational pedagogy, Curricula and students' textbooks on vocational courses and also reading materials on *Mahatma Gandhi: Life, ideals and values*, *Early writing: A beginning*, *On the threshold of reading*, *Padhna hai samjhna*, *Teaching reading: A beginning*, *knowledge traditions and practices in India*, etc. In order to provide clear vision of the system and to articulate this from an evidenced-based position, the Council is involved in research studies in different areas of school education and teacher education viz., on integrating pedagogical content knowledge in science, art integrated learning, inclusiveness of schools, education of children with disabilities due to chronic health impairments, pedagogical processes in Urdu language, three language formula, school climate and students' outcomes, gender equality in India and Korea, status of girls' hostel scheme, student internship programme, pre-primary teacher education programme of India, implementation of vocational education in schools, effectiveness of virtual laboratory, etc.

The Council was also involved in the development of online and certificate courses, reading material for teacher counsellors, handbooks on art integrated learning, textbooks in music, visual arts, computer science and informatics practices, tactile books, exemplars based on learning outcomes, anthology of *Balkathayen*, transformatory material for awareness generation and attitudinal change with respect to gender, *Tamanna: an aptitude test*, Exemplar Bridge Course for Out of School Children, etc. Going forward, we have extended our outreach in the global arena providing expertise in our domain areas as well as acquiring learning from foreign institutions and countries.

With the continued support we have received from the Ministry of Education (MoE), other collaborating ministries, and State/UTs we were able to dedicate our energies to newer horizon-stretching aspirations to benefit all stakeholders. I thank Ministry of Education and all the collaborators for bestowing their confidence in NCERT and all my colleagues across the country for the dedication and hard work. My sincere appreciation to the faculty of the Planning & Monitoring Division, Prof. Sridhar Srivastava (Head), Dr. Ashita Raveendran and Dr. P.D. Subhash for their vital contributions

in bringing together the Councils achievements and landmarks for the year in this annual report.

With all the enormous strides taken up by the NCERT elaborated through this Annual Report, we intend to provide our benefactors and beneficiaries a window into how NCERT is reinventing itself to address the pertinent issues and progress in education for building up a futuristic India. This, I am confident, will help us and our stakeholders to be even clearer about the higher-level results we need to aspire for and efforts required for developing strategies to propel the next phase of growth.

New Delhi
November 2020

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
ATS	Apprenticeship Training Scheme
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
CEMCA	Commonwealth Educational Media Centre for Asia
CERM	Certificate of Educational Research Methodology
CII	Confederation of Indian Industry
CLASS	Computer Literacy and Studies in Schools
CIET	Central Institute of Educational Technology
CMP	Common Minimum Programme
COETG	Centre of Excellence in Tactile Graphics
CoL	Commonwealth of Learning

CPSC	Colombo Plan Staff College
CRC	Cluster Resource Centre
CRISP	Centre for Research and Industrial Staff Performance
CSIR	Council of Scientific and Industrial Research
CSR	Corporate Social Responsibility
CTE	College of Teacher Education
CTES	Certificate Programme for Teaching of Elementary School Science
CTEVT	Council for Technical Education and Vocational Training
CTSA	Centre Tibetan Schools Administration
CU	Curtin University
CWA	Children with Autism
CwD	Children with Disability
CWSN	Children with Special Needs
CwVI	Children with Visual Impairments
D.El.Ed.	Diploma in Elementary Education
DAB	Departmental Advisory Board
DACEP	Developmental Activities in Community Education and Participation
DBTB	Delhi Bureau of Textbooks
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
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
DVET	Diploma in Vocational Educational and Training
ECCE	Early Childhood Care and 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
FGD	Focus Group Discussion
FOSS	Free and Open Source Software
FSSAI	Food Safety and Standard Authority of India
FSU	Florida State University
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
HoS	Heads of School
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
IJEHSS	International Journal of Education Humanities and Social Science
IJET	Indian Journal of Educational Technology
INDEM	Inter Demonstration School Meet
INMANTECH	Innovative Practices and Digitalization to Enhance Teacher Education Programme
IRD	International Relations Division
ISLP	Integrated School Language Programme
ISMP	Integrated School Mathematics Programme
IT	Information Technology
ITPD	In-service Teachers Professional Development
JCERT	Jharkhand Council for Education Research and Training

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
NCSSSH	National Conference on Statistics for Sciences, Social Sciences and Humanities
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
NISHTHA	National Initiative for School Heads' and Teachers' Holistic Advancement
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
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
NSFFI	National Science Film Festival of India
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
OJT	On-the-Job Training
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
PwD	Person with Disability
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
SLBSRSV	Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha
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
SSBLK	Senior Secondary Biology Lab Kit with Microscope
SSBLK-WM	Senior Secondary Biology Lab Kit without Microscope
SSCLK	Senior Secondary Chemistry Lab Kit
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
TITI	Training Institute for Technical Instructors
TLM	Teaching Learning Material
TNA	Training Needs Analysis
TPCK	Technological Pedagogical Content Knowledge
TVET	Technical and Vocational Education and Training
UGC	University Grants Commission
UIET	University Institute of Engineering & Technology
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
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 Teacher
WYSD	World Youth Skills Day

Contents

<i>Foreword</i>	<i>iii</i>
1. Overview	1
2. Major Publications	28
3. Research Studies	36
4. Development Activities	75
5. Capacity Building Programmes	99
6. Extension Activities	128
7. Major Schemes of MHRD Co-ordinated by the NCERT	164
8. Visitors to the NCERT and Foreign Visits by the NCERT Faculty	177
9. Appendices	185–292
I Publications and Presentations by the NCERT Faculty	186
II Ph.D. Degrees Awarded during the year under the Supervision of the NCERT Faculty	205
III Awards and Fellowships	207
IV Details of the NCERT Committees, as mentioned in MoA, for the year 2019–20	217
V NCERT's Consolidated Sanctioned Strength of Posts as on 31 March, 2020 and Reservation Position	257
VI Receipts and Payments Account for the Year Ended on 31 March, 2020	258
VII Publications released during the year 2019–20	269
VIII Publication Division and its Regional Production-cum-Distribution Centres	282
IX NCERT Constituents and Faculty	283

‘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 6 June, 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 (RIEs) 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.

The NCERT as the 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 layperson, NCERT is synonymous with publication of textbooks. Indeed NCERT has produced generations of textbooks for school children in 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 Framework 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.

The 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 marginalised groups, etc., through exhibitions, competitions and a host of other activities. The NCERT conducts the prestigious National Talent Search Examination (NTSE) in which 1,000 meritorious children are provided scholarships every year for pursuing courses in sciences and social sciences up to the doctoral level and in professional courses like medicine and engineering up to second-degree level. To make learning joyful, The NCERT has produced several supplementary and non-textual materials, both for teachers and students, in print and in electronic form. The NCERT has also developed equipment and kits for experiments in science and mathematics.

In order to establish meaningful linkages and partnerships with the states, the NCERT has provided academic inputs in several central sector projects or 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, *Samagra Shiksha*, 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.

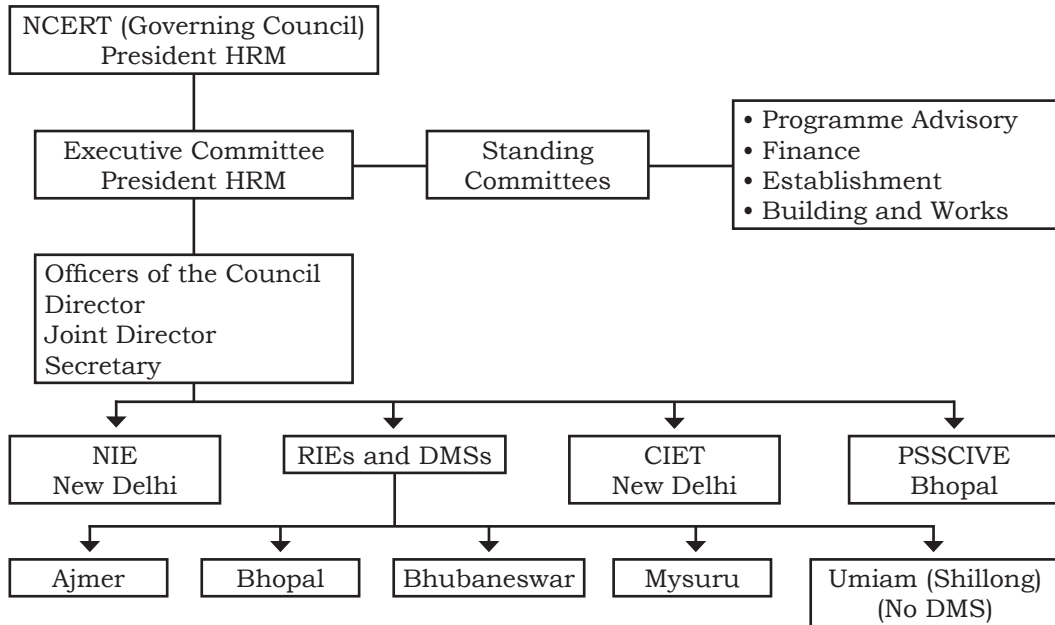
Some other major initiatives of the NCERT in recent years include— the countrywide training programme called National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA), digitalisation of education through the development of e-Textbooks and QR code e-resource mapping of the NCERT textbooks, National Repository of Open Educational Resources; starting of Massive Open and Online Courses (MOOCs) for school education system, live discussions on different areas of school and teacher education on SWAYAM Prabha DTH-TV Channel and YouTube channel of the NCERT, Post National Achievement Survey interventions based on the NAS findings for the quality improvement in school education, competency based curriculum for vocational courses based on National Skills Qualification Framework (NSQF) and textbooks for vocational courses, guidelines for Art Integrated Learning at elementary level of school education, Pre-school Curriculum and Guidelines for the Pre-school Education, quality interventions through block level research projects in six blocks of the country for bringing in quality improvement in the teaching-learning process, Integrated School Mathematics Programme (ISMP) and Integrated School Language Programme (ISLP), etc.

ORGANISATIONAL STRUCTURE

The General Body of the NCERT comprises Education Ministers of all States and Union Territories, Chairperson of the University Grants Commission (UGC), the Secretary, Department of School Education and Literacy, Ministry of Human Resource Development, Government of India, 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 the NCERT.



The Executive Committee is the main governing body of the NCERT. The committee generally carries out the objectives of the Council as set forth in the Memorandum of Association and controls the management of all the affairs and funds of the Council. The Union Minister of Human Resource Development is its President (*ex-officio*) and the Union Minister of State in the Ministry of Human Resource Development is the Vice-President (*ex-officio*). The members of the Executive Committee are the Director, NCERT; Secretary, Department of School Education and Literacy, Ministry of HRD, Government of India; 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 Advisor 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 or 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 2019–20, 139th and 140th Finance Committee meetings were held at NIE, New Delhi on 21 May, 2019 and 5 December, 2019 respectively.

Senior Functionaries of the NCERT

The functions of the Council are maintained by the Director, Joint Director and Secretary. The Dean (Research) coordinates the research programmes and manages 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 (Coordination) coordinates the research, development, training and extension activities of the different constituent units of NCERT.

Senior Functionaries of the NCERT 2019–20	
Director	Hrushikesh Senapaty
Joint Director	-
Secretary	Major 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 (Co-ordination)	Sridhar Srivastava

PLANNING AND PROCESSING OF PROGRAMMES

The programmes of the 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 or divisions or cells of the NIE are processed through the Advisory Boards of the individual departments (DABs) 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 of educational research is one of the major activities of the NCERT. Research programmes proposed by the constituents of the NCERT and other institutions or 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

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 or long term courses or 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 or Divisions or Cells of the 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, Environment and Computer Science at upper primary, secondary and higher secondary stages. It experiments with teaching-learning strategies involving new methods and technologies, and develops instructional material as well as material for training of teachers and teacher-educators.

The department also assists and advises the Ministry of Human Resource Development, Government of India in various science, mathematics and environment education related issues and concerns. It also extends its



cooperation and expertise to other departments and divisions of NIE as well as other constituents of the NCERT in various activities related to development of curricular, co-curricular and other support materials for students as well as teachers. Faculty members of the department also provide its expertise to SCERTs, State Boards of School Education, Central and State governments, Universities, etc. Major activities of the DESM include curriculum development, conducting teacher orientation or training programmes, dissemination of information in Science, Mathematics and Environmental Education, development of innovative laboratory practices and publication of the Journal *School Science*. The department has also developed a Science Park, a herbal garden which provides valuable information and idea for schools to replicate the same for benefit of children. The Resource Centre for Science and Mathematics Education (RCSME) of the department is a rich repository inclusive of both print and electronic resources on science and mathematics education.

The department develops and disseminates material for popularisation of Science, Mathematics and Environmental Education. It also organises the Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for children, which is an annual event that marks the culmination of a series of science exhibitions, organised at district, zonal and state levels. DESM also provides academic guidance and financial support for the State Level Science Exhibitions.

2. DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

The Department of Education of Groups with Special Needs (DEGSN) was established on 1 September, 1995. This department works in the area of education of children with special needs and children belonging to socially disadvantaged groups, such as SCs, STs and minorities. It strives to implement an inclusive system of education for all children which assumes greater significance for systemic reforms especially in the context of the socially disadvantaged and for 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 the 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 levels 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 the major thrust in the areas of educational psychology, guidance and counselling and value education, 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. This 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.

4. DEPARTMENT OF TEACHER EDUCATION

Teacher education is an important and the most crucial input for improving the quality of school education as the policies, programmes and curriculum that are prepared for schools are to be implemented through active involvement of the teachers. Accordingly, the teachers' preparation needs to be in harmony with the current and future needs of the schools. The Department of Teacher Education (DTE), therefore, addresses itself to the task of formulation and organisation of pre-service and in-service teacher-education programmes. The programmes and activities of the department focus on research in the area of teacher education; development of materials and capacity building of teachers and teacher-educators; academic support to the institutions of teacher education created under centrally sponsored scheme like BITEs, DIETs, SCERTs, CTEs and IASEs; promotion of innovations and experimentations in teacher education and school education and organisation of extension programmes.

The role and functions of the Department are to participate in the policy formulation and perform advisory role in matters concerning teacher education and to provide technical support to MHRD and State/UT governments in the formulation, implementation and evaluation of centrally sponsored schemes for qualitative improvement of teacher education; perform 'Think Tank Function' in the area of teacher education and pedagogy which include review/renewal of pre-service teacher education programmes at different levels and formulation of models/designs of in-service education, continuing education and lifelong education of the teachers; adopt and assist SCERTs/SIEs/DIETs/BITEs, for developing/strengthening them as professional institutions in the respective States/UTs dealing with all aspects of school education and teacher education; promote innovations and experimentations in the field of school education and teacher education; organise in-service and continuing education programmes of varied duration for teacher educators/master trainers/Key Resource Person (KRP) at different levels utilising emerging Information and Communication Technologies (ICT); undertake policy related research/studies, interdisciplinary researches, evaluative studies and comparative studies on the issues related to teacher education like pre-service teacher education curriculum, in-service training designs, foundation components of pre-service teacher education, practice teaching school/professional experience programmes and pedagogy; and to develop materials highlighting new approaches of teaching-learning, pedagogy and teacher's training as highlighted in NCF-2005, NCFTE-2009,



RTE Act, 2009, Report of Justice Verma Commission-2012, and NCTE Regulation, 2014.

5. DEPARTMENT OF ELEMENTARY EDUCATION

The 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 issues 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— Primary Education, Integrated School Mathematics Programme (ISMP), Integrated School Language Programme (ISLP), Out of School Children, School Based Assessment and Pre-school 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 and works in the area of language education at all stages of school education. 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. Online programme in Urdu has also been initiated. Besides these, e-content and Quick Response (QR) codes are also 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. Research on the policy of three language formula and classroom based research is in progress. 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. Extension activities are carried out to share and disseminate innovative practices, materials and prospective vision in language education. It has been bringing out an online magazine *Bhasha Sangam* for the last three years with a view to promote multilingual and multicultural character of a plural society.

7. DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

The Department of Education in Social Sciences (DESS) undertakes various programmes pertaining to research, development, training and extension in the area of history, geography, economics, political science (Classes 6 to 12), Sociology, and Commerce (Classes 11 and 12). The prominent activities of the department includes development of syllabi and textbooks, preparation



of teachers' handbook, training manuals, supplementary readers, conducting research studies in social sciences and commerce, assessment of textbooks, evaluation of materials, pedagogical practices and organising teacher's training programmes, refresher courses, development of e-Contents and conducting MOOCs courses for the promotion of social science and commerce education in schools.

The department develops variety of innovative curricular materials with a focus on inclusive education. Development of curricular materials in Health and Physical Education at the secondary and higher secondary stages is another prior activity in the department. Developing awareness about road safety and mobility in schools, organising national level Yoga Olympiad every year are other recent initiatives in the department.

On a regular basis, the Department has extended academic support to various States and Central agencies in the development and evaluation of curricula and instructional material on Continuous Comprehensive Evaluation (CCE) and Learning Outcomes and actively associated itself with series of training workshops in all regions of the country. 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

The Department of Education in Arts and Aesthetics was created 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 or 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 or non-government organisations which actively involved in the area of art education.



9. DEPARTMENT OF GENDER STUDIES

The Department of Gender Studies (DGS) initially created as a Women's Education Unit in 1979. It was upgraded to a full-fledged Department of Women's Studies in 1989 to address the issues of girls' education and women's empowerment more intensively. The Department was renamed as the Department of Gender Studies in the light of landmark judgment of the Supreme Court of India in 2014, for treating transgender as 'third gender' and addressing their concerns. The major role 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 viewpoint of gender bias and stereotyping, development of gender inclusive modules and exemplar materials for teacher educators and teachers; work towards bringing positive societal change in favour of girl child and transgender and enable them to attain their full potential, conduct evaluation studies for centrally sponsored schemes and programmes related to girls' education and their overall development, community mobilisation, preparation of online course and motivational material, training of teacher educators and provide inputs to pre-service and in-service education of teachers for promoting gender sensitisation among practitioners. The department plans and implements its research, development, training and extension activities in accordance with its role and functions.

10. DIVISION OF EDUCATIONAL RESEARCH

The 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 the NCERT, called Educational Research and Innovations Committee (ERIC), acts as a catalyst to promote and support research in prime 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 pursuing for doctoral degrees in University or Research institutions. The new scheme 'NCERT Research Associateship' (Educationists' or Researchers' Pool) provides opportunities to young educationists or educational researchers, who have doctoral degree on topics related to school education but not on regular jobs, to contribute and gain experience in their relevant areas pertaining to school education.

11. EDUCATIONAL SURVEY DIVISION

The Educational Survey Division is created in 2012 by merging two erstwhile departments of NCERT, namely, Department of Educational Measurement and Evaluation (DEME) and Department of Educational Survey and Data Processing (DES&DP) for the purposes of conducting educational surveys on census and sample basis with a view to provide authentic information (data



or database) on various aspects of school education for strengthening the educational planning in the country.

The functions of the Division are:

- ❑ 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 talents.

12. DIVISION OF EDUCATIONAL KITS

The 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 or 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 or teachers or 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 or students or 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

The 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 or 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 the 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 the NCERT.
- ❑ Preparation of the 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 meetings 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
- ❑ Co-ordination 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. INTERNATIONAL RELATIONS DIVISION

The 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 include: (a) facilitate exchange of information between NCERT and agencies and institutions abroad, (b) facilitate signing of MoUs between the NCERT and willing agencies/institutions abroad and also maintain such records; and (c) discharge



responsibility as the Academic Secretariat of the National Development Group (NDG) constituted by MHRD under the aegis of the UNESCO's Asia Pacific Programme of Educational Innovations for Development (APEID).

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

The IRD has so far signed three Memorandums of Understanding (MoU): (a) Academy of Korean Studies (AKS), Republic of Korea, (b) Mauritius Institute of Education (MIE), Mauritius, and (c) Curtin University (CU), Australia. The objective behind the signing of these MoUs was to foster structured and meaningful relations with these countries for mutual benefit in improving the quality of school education. During the year, the department worked on various activities as defined in these MOUs. The process of signing MoU with Florida State University (FSU) and University of St. Francis, USA was also initiated. The areas for mutual cooperation in different areas of the school education were also explored with Germany, Bhutan and Indonesia. The IRD has also worked out a 'Vision Document' through which it would be possible to increase the Council's international footprints that it richly deserves.

15. DEPARTMENT OF CURRICULUM STUDIES

The Department of Curriculum Studies (DCS) was created on 5 September, 2016. The department was set up basically to look after various aspects of curriculum research and development. The department engages in generating knowledge based on curriculum practices and textbooks; building capacities of agencies in States or UTs serving in school education on curriculum research and development; building capacities of teachers and teachers educators in contextualising teaching-learning resources, 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.

16. 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 Official Language Hindi in the day-to-day functioning of the Council, Hindi Cell was constituted in the Council Headquarters.

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.

17. PUBLICATION DIVISION

The NCERT continues with the publication of school textbooks, workbooks, supplementary readers, teachers' guides, laboratory manuals, sourcebooks on assessment, exemplar problems, research reports or monographs and educational journals. For adoption or adaptation and translation of NCERT books by various States or UTs, copyright permission is granted by the 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, which include Kendriya Vidyalayas, Jawahar Navodaya Vidyalayas, Central Schools for Tibetan and several private schools in all States and UTs of the country and abroad.

In its endeavour to make quality textbooks available at a very reasonable price, to the students in all parts of the country, NCERT has empanelled 979 book sellers as vendors. For the distribution of Urdu Publications, NCERT has engaged Urdu Academy, Government of NCT, Delhi as its distributor.

With the help of a dedicated web portal, the Publication Division, NCERT extends the facility to schools for placing online orders of textbooks as per their requirement. The requirement so placed by the schools not only help NCERT to ascertain the demand of the textbooks but also help in supplying the books on priority basis. Schools have the option either to collect their requirement of the NCERT textbooks directly from NCERT or from any other empanelled vendor as per their convenience. The NCERT's web portal also extends the facility to order the NCERT publications online to all individuals and institutions. The orders so received at the NCERT's web portal are delivered through registered book post at the customers' door-step.

The Publication Division, NCERT is also supplying textbooks directly to the various educational institutions, government agencies, school organisations such as Navodaya Vidyalaya Samiti, Model Schools of different States, Governments of Arunachal Pradesh, Sikkim and Gujarat. Besides textbooks, Publication Division, NCERT published several titles under the category of 'Teachers' Guide', 'Research Monographs', 'Supplementary Reading Materials, and 'Books on Vocational Courses'. Under the *Samagra Shiksha Abhiyan*, Governments of Uttar Pradesh, Haryana and Himachal Pradesh have placed orders for the supply of library books for more than 100 crore of rupees.

Four Regional Production-cum-Distribution Centres of the Publication Division, NCERT, located at Kolkata, Bengaluru, Ahmedabad and Guwahati are catering to the needs for the NCERT Publications in the eastern, southern,



western and north-eastern parts of the country, respectively. The Delhi headquarters caters to the requirement of northern India. There are ten Sales Counters operated directly by the NCERT, Publication Division. These counters are functional throughout the year at four RPDCs, five Regional Institutes of Education and at Delhi headquarters to ensure easy availability of NCERT publications to all individuals and institutions.

18. 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-services 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. The future projections are interlinking of NIE, CIET and RIE libraries; developing guidelines for procedure, hardware or software for institutional repository at NIE and its constituent libraries. The proposal to shift from LIBSYS to KOHA software has been initiated and proposal for procuring and accessing online journals to be shared by NIE and its constituent libraries is in progress.

II. Central Institute of Educational Technology

Central Institute of Educational Technology (CIET), a constituent unit of NCERT, came into existence in the year 1984 by merger of Centre for Educational Technology and Department of Teaching Aids. CIET is a premiere national 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, to promote equity and improve quality of educational processes at school level. The institute has four major divisions namely— Department of Information and Communication Technology (DICT), Planning and Research Division (PRD), Media Production Division (MPD) and Engineering Division (ED).



Department of Information and Communication Technology is an instrumental in creation of multimedia materials for students and teachers, imparting training on use of ICT in teaching-learning process and research methodology for ICT in education, etc., for teachers and teacher-educators. Given the latest developments in ET & ICT, the department has expanded itself in the field of ICT from generating Quick Response (QR) codes to developing platforms and mobile apps to repositories with multi-function characteristics.

Planning and Research Division looks after the activities related to planning, conducting and disseminating research. It is also responsible for overseeing the processes for developing new programme proposals, their approval from the bodies like Institute Advisory Board (IAB) of CIET; Programme Advisory Committee (PAC) of the NCERT and Project Advisory Board of Ministry of Human Resource Development (MHRD) and finally ensuring the timely execution of the approved programmes besides compiling and sharing the monthly, quarterly and annual reports of academic activities of CIET with the NCERT headquarter. In order to take forward the dialogue in research, the division has also been instrumental in publishing an online open access peer-reviewed journal, *Indian Journal of Educational Technology* (ISSN 2581–8325) since January 2019 which has been listed under UGC list.

The primary mandate of the Media Production Division (MPD) is to produce high quality educational audio-video programmes for the school going children (age 5 to 18 years) and teachers (primary and secondary). Expanding its horizon to serve the learners even in the far-flung areas of the country, the division is now instrumental in telecasting 24×7 DTH TV Channel as well as radio programmes on *Gyan Vani*. The division has also started helping various States of India to broadcast their e-Content on television. In order to keep pace with the new developments in the field of content development, it has developed Augmented Reality (AR) based content that have been embedded in the NCERT textbooks.

Engineering Division is an important Division of the CIET as its main mandate is to equip the institute with the modern and latest technologies to help the CIET to achieve its goals and objectives. The division has been procuring and maintaining the equipments (hardware) and software required by the other three divisions of CIET apart from maintaining the digital learning lab developed exclusively for training purposes.

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

Pandit Sunderlal Sharma 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 the 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 vision of the institute is to develop as a world class resource organisation in vocational 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 (Classes 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., as 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 institute. The institute is also responsible for training teachers and capacity building of state key functionaries for effective implementation of NSQF.

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 or 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 and 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 or in-service training programmes for capacity building of the staff of DIETs, CTEs, IASEs and SCERTs and other educational functionaries of the States and 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 the 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.

IV. 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 the NCERT. Later it was renamed as Regional Institute of Education, Ajmer in the year 1995. Since its inception, the institute has been supporting the States and UTs of Northern Region in improving the quality of school and teacher education through its educational research development programmes, 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 (MDS) 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 face-to-face and online mode for which the diploma certificate is provided by the NCERT. The faculty of the institute is also guiding research scholars enrolled for Ph.D. in different subjects areas in the M.D.S. University.



V. Regional Institute of Education (RIE), Bhopal

The Regional Institute of Education, Bhopal earlier known as Regional College of Education was established in 1963. It caters to the pre-service and in-service education 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 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. RIE, Bhopal has launched three year B.Ed., M.Ed. integrated programme from the session 2018–19.

VI. Regional Institute of Education (RIE), Bhubaneswar

The Regional Institute of Education, Bhubaneswar caters to both pre-service and in-service needs pertaining to school education of the States Odisha, Bihar, Jharkhand, West Bengal, Sikkim, Manipur, Mizoram, Meghalaya, Arunachal Pradesh, Nagaland, Tripura and Andaman and Nicobar Islands. The following regular pre-service programmes are running in the Institute 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 Counselling 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.

VII. Regional Institute of Education (RIE), Mysuru

The Regional Institute of Education, Mysuru formerly known as Regional College of Education was started on 1 August, 1963. The Regional College of Education is currently functioning as Regional Institute of Education with effect from 18 April, 1995 with an intension to focus more on in-service teacher education programmes besides experimenting innovative pre-service teacher education programmes. The current pre-service teacher training programmes of the institute are four-year B.Sc., B.Ed., B.A., B.Ed., six-year M.Sc. Ed., in Mathematics, Physics and Chemistry, after higher secondary, two-year B.Ed. and two year M.Ed. All these programmes are affiliated to the University of Mysore and cater to the needs of Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, Puducherry and Lakshadweep and the PG programmes cater to all the States of the country. Apart from the above, a DCGC (Diploma Course in Guidance and Counselling) is also offered by the institute. This programme caters to the needs of teachers of JNVs, KVs and from the state Government schools.



VIII. North-East Regional Institute of Education (NE-RIE), Umiam (Meghalaya)

North-East Regional Institute of Education was set up at Umiam, Meghalaya to cater, to the educational needs of North-Eastern States, which include Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura keeping in line with the 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 NERIE 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.

NERIE started its two-year regular full time B.Ed. course from the session 2015–16. The course has been approved by National Council of Teacher Education (NCTE) and duly affiliated to North Eastern Hill University (NEHU), Shillong. In 2019–20 batch, a total of 94 students have been enrolled. Besides the B.Ed. course, NERIE offers Diploma Course in Guidance and Counselling (DCGC).

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 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.

DEMONSTRATION MULTIPURPOSE SCHOOL, 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 a good collection of Multimedia CD and DVDs.

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.

DEMONSTRATION MULTIPURPOSE SCHOOL, BHUBANESWAR

The school was established in the year 1964 as a laboratory school of the then Regional College of Education under NCERT. The school participates in identification, analysis, research and development related to major areas of school education and mostly serves as a centre for teachers' training of the Regional Institute of Education. It acts as a pace-setting school for the Eastern Region of India affiliated to Central Board of Secondary Education.

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 lays 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, 2019–20

PUBLICATIONS

The NCERT continues with the publication of school textbooks, workbooks, supplementary readers, teachers' guides, laboratory manuals, sourcebooks on assessment, exemplar problems in mathematics, research reports or monographs and educational journals. Apart from non-textual material, 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. They are also used widely in schools affiliated to the CBSE, which include Kendriya Vidyalayas, Jawahar Navodaya Vidyalayas, Central Schools for Tibetan and several private schools in all the States and UTs. Many States and UTs have obtained copyright for NCERT textbooks. The Council also uses QR codes in its textbooks.

During the year, the Council brought out the publications— *Vishesh Aavshyakta Vale Bachchon Ka Samaveshan Uchch Prathmik Sttar*; *Computer Science Class XI*; *Health and Physical Education 'A Teacher's Guide for Class VIII'*; *Micro Irrigation Technician (Job Role)*; *Gardener (Job Role)*; *Cable Joints Electrical Power System (Job Role)*; *Distribution Lineman (Job Role)*; *Unarmed Security Guard (Job Role)*; *Consumer Energy Meter Technician Class IX (Job Role)*; *Words and*



Expressions–2 Class X; Plumber General–II Class XI (Job Role); Beauty Therapist Class XI (Job Role); NISHTHA Training Package; Veergatha Paramveer Chakra Vijetaon Ki Kahaniyan; Uchhtar Madhyamik Jeev Vigyan Prayogshala Kit Pustika Classes XI and XII; Mazedaar Hai Ganit Classes I and II; Informatics Practices Class XI; Bhasha Shikshan, Hindi Bhag–2 Dritya B.ED. Pathyakram Ke Liye Pathyapustak; Installation Technician Computing and Peripherals Class XI (Job Role); Biotechnology Class XI; Animal Health Worker Class X (Job Role); Vigyan Adhigam Samagri Uchch Prathmik Istar Par Parshav Pravesh Ke liye Kaksha 6–8; Handbook on Understanding Science through Activities, Games, Toys and Art Forms; Uchch Prathmik Vigyan Kit Manual Kaksha 6, 7 aur 8 and Bhartiya Bhashaon Ka Shikshan Rashtriya Focus Samooh Ka Aadhar Patr (1.3).

During the year under report, 679 publications were released. The Publication Division, NCERT empanelled 979 dedicated book sellers as its vendors for ensuring availability of NCERT publications across the country. The Urdu publications were distributed or sold through Urdu Academy, Government of NCT of Delhi.

RESEARCH STUDIES

In the area of educational research, the Council conducted studies in different areas of school education and teacher education viz., challenges faced by the teachers integrating Pedagogical Content Knowledge in science teaching, learning environment in primary schools practicing Art Integrated Learning, inclusiveness of schools at the elementary level, education of children with disabilities due to chronic health impairments, pedagogical processes in Urdu language at elementary level in *Madrasas*, English language classroom implementation of three language formula, relationship between perception of school climate and students' outcomes, implementation of intervention strategies and its effectiveness in the achievement of learning outcomes in science at upper primary stage, participation and performance of girls in National Talent Search Scheme (NTSS), policy research on education and skill development from the perspective of gender equality in India and Korea, status of girls' hostel scheme, student internship programme at secondary teacher education level, interventions to achieve quality learning in science in related schools in ST dominated districts of Nagaland, enriching Teacher Education Institutions (DIETs) for promoting sustainable development, pre-primary teacher education programme of India, implementation of vocational education (from Classes IX to XII) in schools, learning resources in understanding the concepts of stereo-chemistry and reaction mechanism in organic chemistry at senior secondary level, effectiveness of virtual laboratory on achievement in science at secondary school level, assess the implementation of social science pedagogical training programme in classroom process of Maharashtra, Porta Cabin School of Bastar Region of Chhattisgarh State, reorganisation and merger of schools at elementary level in the context of the RTE Act, 2009 in Jharkhand, evaluation of in-service teacher training on classroom practice in mathematics at senior secondary stage of Andaman and Nicobar Islands, Art



Integrated Learning at elementary level, evaluation of effective implementation of D.El.Ed programme in Andhra Pradesh, etc.

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 North-East, 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.

In addition, the Council supported educational research through Educational Research and Innovations Committee (ERIC). During the year, nine research projects were completed with the financial support of ERIC. 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 worked on their disciplines directly related to education. In 2019-20, 10 candidates have been given Doctoral Fellowship from NCERT.

DEVELOPMENT ACTIVITIES

The development works of the Council include: Course material for the certificate course on curriculum design and implementation of course, online courses on arts education and local heritage mapping, teaching of Urdu and Hindi, skill enhancement for teachers on value education, reading material for teacher counsellors on dealing with behavioural issues among school adolescents, teachers' handbooks on art integrated learning, textbooks in music, visual arts and computer science and informatics practices, Hindi version of the book including children with autism in primary schools, tactile books in mathematics, e-Content in music, guidelines for nurturance of gifted and talented children, identification tool for disability conditions recognised in RPWD Act, 2016, supplementary reading materials in Hindi, English, Urdu and Sanskrit, anthology of *Bal Kathayen* in Hindi written in Indian languages, e-Content in languages Hindi, English and Urdu, textual material on inclusive education in Urdu for D.El.Ed. and B.Ed. students, conceptual glossary of terms used in teaching-learning process, teaching-learning material in Urdu on 'assessment as learning' for the students of B.Ed., handbook in English on exemplars based on learning outcomes, workbook in English for Class X, *Tamanna: An Aptitude Test for School Students*, Activities in Chemistry at Higher Secondary Stage, audio/video resources on experiments/activities in biology and chemistry, resource material on management/conservations of water, transformatory material for awareness generation and attitudinal change with respect to gender, handbook on multilingual education for the aspirational districts Narmada and Dahod, mathematics practical manual for B.Sc., B.Ed., handbook on field engagement in pre-service teacher education in Odisha, e-Resources for the school and teacher education curriculum, etc.

In the continuum with the *Learning Outcomes at the Elementary Stage*, *Learning Outcomes for Secondary Stage* (Classes IX and X) in the subjects (Hindi, English, Sanskrit, Urdu, Science, Social Science, Mathematics, Health and Physical Education and Art Education) have been developed in coordination



with all units of NCERT. It was released by the MHRD and has been uploaded on the NCERT website.

EDUCATIONAL TECHNOLOGY

Recognising the potential of technology in teaching-learning, various innovative curricular materials have been developed by the NCERT. The Council developed e-Content which include images, 700 audio programmes, 597 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 teacher education. During the academic year 2019–20, Cycle 4 has started with 21 courses (including 19 courses for students and 2 courses: Action Research in Educational Technology course for in-service teachers and Food Nutrition for Healthy Living course for teacher-educators and generic audience). A total of 7,293 learners were enrolled in these courses. Cycle 5 has started with 27 courses (22 students courses, 2 for teacher-educators and 3 generic courses) from 1 October, 2019 till 31 March, 2020.

SWAYAM Prabha DTH Channel telecast educational video programmes for learners of secondary and senior secondary students and teachers. NCERT has been assigned Channel #31, 'Kishore Manch'. five hundred and fifty four episodes of daily live discussion programme were telecast on every working day from 11:30 am to 12:00 noon. Forty-eight live episodes were telecast on every Friday (Educational administration) from 3:00 pm to 3:30 pm. Apart from this, 5 hours of content telecast on SWAYAM Prabha Channel #31 'Kishore Manch'.

National Repository of Open Educational Resources (NROER), an online repository (<http://nroer.gov.in> (NROER) in which the learners can freely access and use resources under the CC by SA license. Around 5080 new resources including 1016 audios, 12 images, 62 videos, 836 interactives and 3154 documents have been added during the year to NROER platform.

e-Pathshala, a portal/app developed and launched in November 2015, hosts educational resources for teachers, students, parents, researchers and educators, can be accessed on the Web, and is available on Google Play, App Store and Windows. The content is available in English, Hindi and Urdu. It offers educational resources, including NCERT textbooks for Classes I–XII, audio-visual resources developed by the NCERT, periodicals, supplements, teacher training modules and a variety of other print and non-print materials. Digital textbooks of NCERT (Reprint 2020–21) of Classes I–XII in PDF, 504 Flipbooks and 696 e-Pub are available in this platform.

CAPACITY BUILDING PROGRAMMES

The Council had organised a mega capacity building programme 'NISHTHA' for the capacity building of teachers and school heads at Elementary Level on learner-centred pedagogies to improve learning outcomes of students. The programme was launched in 30 States/UTs and 22 States/UTs have completed training of KRPs and SRPs-L. A total of 2501 SRPs-L, 12570 KRPS,



408933 Teachers and 42782 Heads and Principals have been trained under the programme.

The Council conducts capacity building/orientation/training programmes for master trainers or Key Resource Persons 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., Indian sign language, guidance and counselling, gender issues in education, vocational pedagogy, implementation of vocational education, paddy farmer in agriculture sector, automobile technology, store operations assistant and sales associate, apparel made-ups and home furnishing sector job role, action research, research methodology, inclusive education, science, mathematics, social science, educational kits, etc.

EXTENSION ACTIVITIES

The extension programmes of the Council include: 46th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children–2019, State Level Science, Mathematics and Environment Exhibitions (SLSMEE) for Children, National Consultation Meet on *Madrasa* Functionaries under Minority Cell Activities, Celebration of International Mother Language Day, National Library of Educational and Psychological Tests (NLEPT), Centre for Popularisation of Science, National Awards for Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions, National Conference on School Leadership Practices, 2019, NCERT Incentive Award for Demonstration Multipurpose School (DMS) Teachers, Information Literacy Programme for the Users of NCERT, National Conference on Re-imagining Technical and Vocational Education and Training for the Changing World: Perspectives and Practices, In-country Programme on Leadership and Change Management for TVET, Extension Lectures of Eminent Educationists, Expression Series on Eminent Personalities, Workshop for Heads and Coordinating Teachers of Co-operating Schools for Internship 2019–20, National Conference on Implications of ‘Gandhians Thought’ for School Curriculum, Working with the Community programme of student teachers of RIEs, Organisation of School Exposure and Multicultural Placement Programme of B.Ed. Students, International Conference on Education in the Twenty First Century, Pre-School Education in Demonstration Multipurpose School, 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.

VOCATIONAL EDUCATION

In the area of vocational education, a document titled, ‘Framework on Vocational Pedagogy’ aiming to prepare master trainers of vocational education through systematic training, textbooks viz., *Employability Skills Class X*, *Animal Health Worker Class X*, *Consumer Energy Meter Technician Class IX*, *Customer Relationship Manager – Voice Class XI* and *Plumber General Class X* and 37 curricula out of the 52 Job Roles which includes Citrus Fruit Grower, Mango



Grower, Pulses Cultivator, Spice Crop Cultivator, etc., have been published by PSS Central Institute of Vocational Education and uploaded on the PSSCIVE website. Also, 45 Training programmes for teachers and key functionaries of States and UTs in the area of vocational education, vocational pedagogy, soft skills, etc., and regional consultation meeting for implementation of vocational education in schools under *Samagra Shiksha* for the States of Southern, Eastern and North-Eastern Regions were conducted during the year.

INTERNATIONAL COLLABORATIONS AND INTERNATIONAL LINKAGES

Keeping in view the importance of international co-operation 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 (AKS), Republic of Korea; Mauritius Institute of Education (MIE), Mauritius; and Curtin University (CU), Australia with the objectives to foster structured and meaningful relations with these countries for mutual benefit in improving the quality of school education. The process of signing MoUs with Florida State University (FSU) and University of St. Francis, USA was also initiated. The areas for mutual co-operation in different areas of the school education were also explored with Germany, Bhutan and Indonesia.





2. Major Publications

The NCERT publishes curricular materials including school textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, sourcebooks on assessment, exemplar problems in mathematics, research reports or monographs and educational journals. Apart from non-textual material, textbooks for different Classes from I to XII are printed every year. The Council has brought out energised textbooks, by using QR Code. Educational journals and magazines are also brought out by the Council.

Art Integrated Learning: Guidelines for Elementary Level of School Education



Art Integrated Learning (AIL) is a framework of experiential learning which provides an equitable learning environment for all learners through their own access points. Students engage in art activities and construct personal meaning through their learning in an art integrated environment. AIL was envisaged as pedagogy applicable to all levels of school education with the objective of developing the target areas of cognitive, socio-emotional and psychomotor domains of the learner. At multiple levels of the teaching-learning process, *Art Integrated Learning* has opened spaces for the existence of a learning that is both inter-disciplinary and holistic in nature. Art Integrated Learning (AIL) is a teaching-learning model

which is based on learning 'through the arts' and 'with the arts'. It is a process where art becomes the medium of teaching-learning, a key to understand concepts within any subject of the curriculum. Learners explore creatively while building connections between different concepts through various art forms. The document *Art Integrated Learning. Guidelines for Elementary Level of School Education* consists of conceptual framework of AIL, research findings to highlight importance of 'learning through the arts'. It provides simple to follow steps as 'strategies of implementation' which is further divided into; (i) capacity building, (ii) orientation and training of educational administrators and teachers, (iii) planning of activities, (iv) time management, (v) classroom management, (vi) resource management, etc. Since AIL is a pedagogy it also acts as an assessment tool. Hence, the document explains the role of AIL as efficient assessment tool. Guidelines also elaborate on roles and responsibilities of the teachers and Heads of School (HoS). The document further suggests a few exemplary activities of AIL to share suggestive plan of hands-on experience for classroom situation. Overall the document is a condensed form of the extensive discussion that leads to the pragmatic functioning of AIL pedagogy.

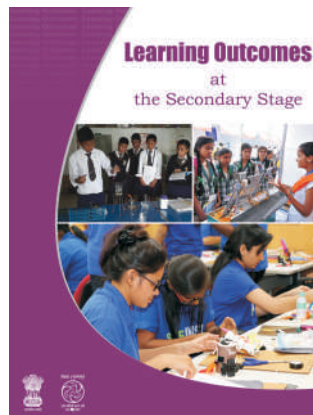
The document on guidelines was released by the Hon'ble HRD Minister, Government of India in December 2019 and it is available in Hindi and English on NCERT website in PDF format and its hard copy of both the versions with ISBN: 978-93-5292-214-7 is available at the NCERT publication counters.

Learning Outcomes at the Secondary Stage

(ISBN: 978-93-5292-201-7)

With an aim to enhance the quality of learning in schools, by enabling teachers to ascertain learning skills more accurately and take corrective steps without delay and provide effective learning opportunities to all students including children with special needs, NCERT has published the *Learning Outcomes at the Secondary Stage* in all subject areas in school education. The challenge of content domination in the learning outcomes has been minimised in consultation with experts, teacher educators and teachers, and has been made in such a way that every State/UT can use these irrespective

of their state's syllabi and textbooks. Moreover, care has also been taken to provide pedagogic processes that match the learning needs of adolescents. Adequate space has been given to national and social concerns such as gender, inclusion, constitutional values, protection of environment, and children with special needs in the learning outcomes. Moreover, the 21st century skills of problem solving, critical thinking, creativity, etc., are also an integral part of the document.

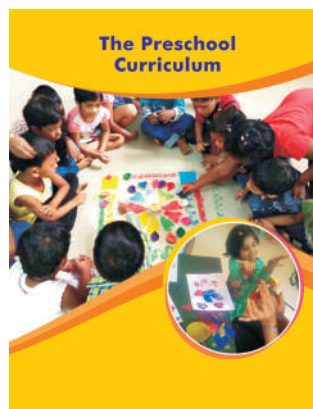


The Preschool Curriculum and Purva Prathmik Vidyalaya Pathyacharya

(ISBN: 978-93-5292-127-0) and

(ISBN: 978-93-5292-213-0)

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

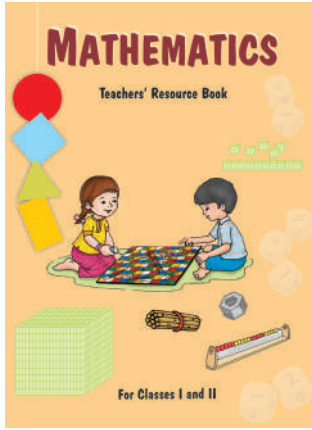


Mazedar Hai Ganit

(ISBN: 978-93-5292-157-7)

For enhancing the interest in mathematics, a resource book named '*Mazedar hai Ganit*' has been developed which is a collection of short stories, poems and riddles related to primary mathematics.

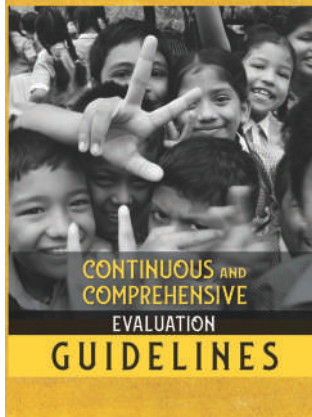




Mathematics Teachers' Resource Book for Classes I and II (English) and Ganit Sthroth Pusthak (Hindi)

(ISSN: 978-93-5292-1324) and
(ISSN: 978-93-5292-0884)

Mathematics teachers' resource book has been developed for the teachers of Classes I and II in both English and Hindi language. The book contains chapters that deal with the core topics of mathematics taught in Classes I and II. Besides, there are chapters that discuss various aspects of teachers' practice. The book tries to support teachers in building their knowledge as well as their skill.



Guidelines on Continuous and Comprehensive Evaluation

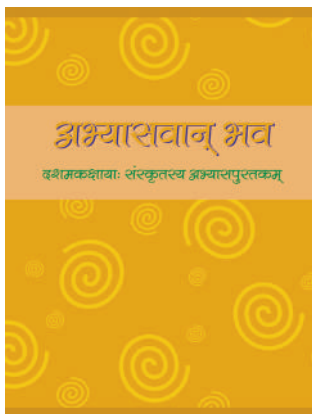
(ISBN: 978-93-5292-128-7)

The guidelines address issues related to the implementation of School Based Assessment and bring uniformity in assessment practices. The guidelines are available in English. These were disseminated to teachers, teacher-educators, and administrators across States and UTs. Guidelines in Hindi and Urdu are under print.



Guidelines for Preschool Education

Guidelines for Preschool Education that have been developed both in English and Hindi language, outlines the parameters for infrastructure, qualifications and salary of preschool staff, admission procedures, records and registers, monitoring and supervision, importance of co-ordination and convergence with community and parents for running a quality preschool programme.



Workbook in Sanskrit for Class X

(ISBN: 978-93-5292-141-6)

Workbook in Sanskrit titled 'Abhyaswan Bhav' Bhag 2 for Class X was developed, finalised and published. The objectives of this book, which is a self-study material, is to provide a variety of rich and comprehensible input. This would help students to improve their skills in Sanskrit language.

Teaching Learning of Economics in Inclusive Education Setting for Senior Secondary Teachers, English and Hindi Version

(ISBN: 978-93-5292-165-2 (Set), 978-93-5292-164-5 (Manual), 978-93-5292-161-4 (DVD 1), 978-93-5292-162-1 (DVD 2), 978-93-5292-163-8 (DVD 3) English Version



(ISBN: 978-93-5292-316-2 (Set), 978-93-5292-317-5 (Manual), 978-93-5292-318-2 (DVD 1), 978-93-5292-319-9 (DVD 2), 978-93-5292-320-5 (DVD 3)
Hindi Version

Most NCERT textbooks are available in Braille script, illustrations, diagrams or pictorial explanations of the concepts are not provided in those publications. Therefore, it has been a challenge for the visually impaired students to ‘visualise’ the content given in those Braille textbooks. Teachers also face difficulties in teaching students with disabilities. This happens due to lack of training and readily availability of support material with appropriate accommodations and format such as tactile form, videos with caption for students and ready to use manual available for teachers. These limitations deter students from learning concepts and topics effectively.

Keeping this in view, a comprehensive exemplar package has been developed in Economics. This package contains the videos with caption, demonstrating actual classroom processes using different methodologies and the manual in print and Braille for detailed description of the classroom process using different methodologies. It also includes tactile diagrams, which are raised, and give similar kind of experience as sighted students to children with visual impairments. These diagrams can be perceived by touch. It is envisaged that this material will facilitate understanding amongst teachers to teach Economics to all students including visually impaired and hearing impaired and create enabling conditions to opt for Economics at senior secondary stage through building confidence and competence of teachers.

Women Saint Poetess of India (DVD)

The DVD on Women Saint Poetess of India contains some of the compositions that they composed in different regional languages. It includes Mirabai’s *padas*, Akka Mahadevi’s *vachanas*, excerpts drawn from Tiruppavai of *Andal*, Gangasati’s *bhajans*, Kanhopatra’s *abhangas* and Lal Ded’s *vakas*. The compositions are tuned in Hindi, Kannada, Tamil, Gujarati and Marathi by eminent artists.

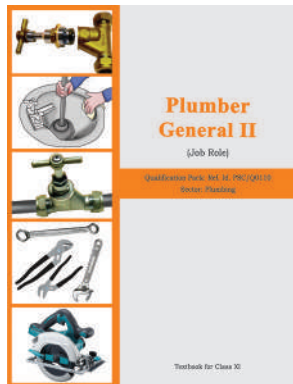
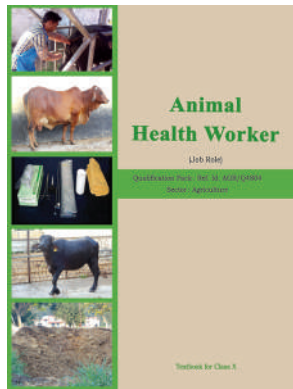
Framework on Vocational Pedagogy

The PSS Central Institute of Vocational Education is providing training on vocational pedagogy to the key functionaries specifically teachers since long time. To formalise the training, the institute has developed a document titled *Framework on Vocational Pedagogy* aiming to prepare master trainers of vocational education through systematic training. This document has two parts. The first part contains Introduction with the background, about the institute and skill India initiatives, present status of vocational education and training in India, need of teachers training in Vocational Pedagogy and curriculum overview with specific objectives and course overview. The second part contains curriculum to train teachers which comprises five modules namely— *National Skill Qualification Framework and Vocationalisation of School Education, Learning Outcome based Curriculum and Vocational Pedagogy, Instructional Methods in Vocational Education, Instructional Media for Vocational Education and Training and Assessment, Evaluation and Certification*. The document is also available on the institute’s website.



Guidelines on Diploma in Vocational Education and Training (DVET)

The one-year Diploma in Vocational Education and Training programme (Distance Mode) was launched in the month of April, 2019 aiming to prepare a teacher specifically for vocational subjects. For launching it in distance mode from July, 2020 a document titled Diploma in Vocational Education and Training (Distance Mode) Programme Guide has been developed. The document contains the details about overview of the programme, admission requirement, programme structure, programme transaction details, rules and regulations of the programme, scheme of evaluation, study material and syllabus of the programme. The document is also available on the institute’s website.



Students’ Textbooks on Vocational Courses

The PSSCIVE, Bhopal has been entrusted with the major task of development of Students textbooks and teacher handbooks for 52 job roles in 18 sectors under NSQF approved by Project Approval Board (PAB), *Samagra Shiksha*, Ministry of Human Resource Development (MHRD), Government of India for the year 2019–20. During the year 2019–20, the textbooks on *Employability Skills Class X*, *Animal Health Worker Class X*, *Consumer Energy Meter Technician Class IX*, *Customer Relationship Manager – Voice Class XI*, and *Plumber General Class X* and *Curricula Citrus Fruit Grower*, *Mango Grower*, *Pulses Cultivator*, *Spice Crop Cultivator*, *Micro-finance Executive* and *Tour Guide*, *Automotive Service Technician (Two and Three Wheelers)*, *Agricultural Machine Operator*, *Irrigation Service Technician*, *Construction Painter*, *Junior Software Developer in IT-ITeS Sector*, *Domestic Biometric Data Operator in IT-ITeS Sector*, *Field Technician* and *Other Home Appliances in Electronics Sector*, *Filed Technician Refrigerator in Electronics Sector*, *Filed Technician Air Conditioner in Electronics Sector*, *Yoga Instructor*, *Beauty and Wellness*, *Hair*

Therapist, *Embroidery Machine Operator (Zigzag Machine) (XI–XII)*, *Fabric Checker (XI–XII)*, *In-Line Checker (XI–XII)*, *Assistant Fashion Designer (XI–XII)*, *Store Keeper (XI–XII)*, *Export Assistant (XI–XII)*, *Packer (XI–XII)*, *Baking Technician*, *Craft Baker*, *Animal Health Worker (revised version)*, *Small Poultry Farmer*, *Food and Beverage Service – Steward*, *Diet Assistant*, *General Duty Assistant*, *Vision Technician*, *Frontline Health Worker*, *Fitness Trainer* and *Physical Activity Facilitator* out of the 52 Job Roles have been published and uploaded on website.

MAGAZINES AND JOURNALS

Firkee Bachchon Ki

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

Firkee Bachchon Ki is a bilingual magazine for young readers. Two issues of June 2019, December 2019 of the children’s magazine ‘*Firkee Bachchon Ki*’

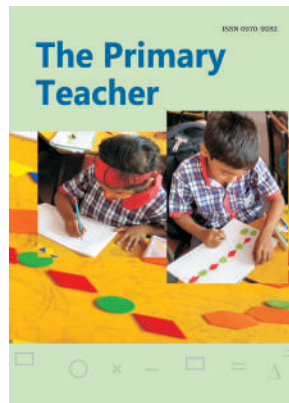


have been published. This caters to the needs of children in Classes I and II by providing them with relevant, interesting reading material in a simple format. The magazine is bilingual in nature., i.e., Hindi and English. This magazine also includes the poems, stories and pictures developed by the students of different parts of India.

The Primary Teacher and Prathmik Shikshak

(ISSN 0970-9312 and ISSN 0970-9282)

Two journals, ‘The Primary Teacher’ in English and ‘Prathmik Shikshak’ in Hindi are published with the objective of providing a forum to the teachers for sharing their innovations and research articles related to school practices. The April 2016 issue has been published. Five issues of *The Primary Teacher* have been sent to Publication Division and four issues of the Journal ‘Prathmik Shikshak’ were sent to Publication Division for publication. *Prathmik Shikshak*, January 2019 issue has been published and April 2019 to January 2020 issues are under publication.



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.



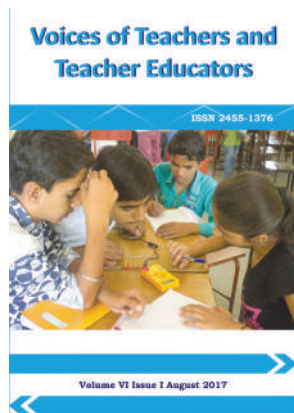
Indian Journal of Educational Technology (IJET)

(ISSN 2581-8325)

In order to facilitate sharing of new researches and facilitate academic discussions in the field of ET & ICT, Indian Journal of Educational Technology was started by CIET. The 2nd (July 2019) and 3rd (January 2020) issues of CIET’s bi-annual, peer reviewed, online, open access journal, have been published on its website (<https://ciet.nic.in/pages.php?id=journal&ln=en>). The journal in an online open access journal published bi-annually in English on Educational Technology. After publishing the 1st issue, i.e., January 2019 the 2nd and 3rd issues of CIET’s journal, *Indian Journal of*



Educational Technology (IJET) were published online on CIET's website (<https://ciet.nic.in/pages.php?id=journal&ln=en>).



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 co-ordinated 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. The issues of Vol. I and Vol. II of the journals were published in July and December 2019.



Indian Journal of Vocational Education

(ISSN 0972-5830)

Indian Journal of Vocational Education (IJVE) is a bi-annual peer reviewed research journal published by PSS Central Institute of Vocational Education (PSSCIVE), a constituent unit of the National Council of Educational Research and Training (NCERT), New Delhi under Ministry of Education, Government of India. The main focus of this journal is to provide a platform for researchers, scholars, academicians to share their research findings in the field of vocational education and training.

Journal of Indian Education

(ISSN: 0377-0435)

The quarterly *Journal of Indian Education (JIE)*; provides a forum for teachers, teacher-educators, researchers and other concerned stakeholders to encourage original and critical thinking in education through presentation of new ideas, critical appraisal of contemporary educational problems and experiences on innovative practices. The content of the journal includes thought-provoking articles, research papers, challenging discussions, innovative practices, book reviews, interviews and other topic of interest to school education.

During 2019–20, a total number of 156 articles, research papers, case studies and book reviews in english were received. The finalised manuscripts after incorporating the suggestions or comments were sent to the Publication Division. Four issues of JIE (i.e., May 2019, August 2019, November 2019, February 2020) were finalised. Latest issues of August, 2019 have been published.



Bhartiya Adhunik Shiksha (BAS)

Bhartiya Adhunik Shiksha — A quarterly journal. This is listed in UGC-CARE list and has been found useful publication for dissemination of ideas, innovations, experiences, best practices and research findings for teachers, teacher-educators, researchers and other concerned with education. The content of these journals include thought-provoking articles, research papers, challenging discussions, book reviews, interviews and other features. This year academic editing of *Bhartiya Adhunik Shiksha* issues, i.e., April 2019; July 2019; October 2019 and April 2020 has been completed. Latest issue April 2019 have been published.



Bi-Annual Journal on Educational Trends

Educational Trends, a Journal of RIE, Ajmer is been published with the objectives to facilitate sharing, documentation and dissemination of the research work, to motivate the faculty members to undertake researches, create research culture and to encourage States and UTs departments of the region to participate, share and publish research work. Two copies of first issue have been submitted to RNI, New Delhi for verification and approval of the title of the journal. RNI has verified the title of the journal and the, RNI number is still awaited. Another issue of the journal on learning objectives is under developmental stage.

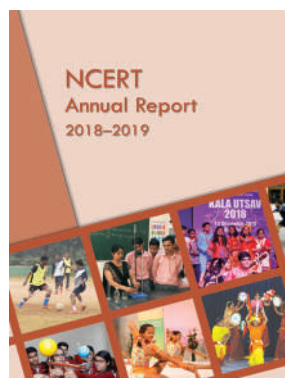
Quarterly Bulletin on Vocational Education

The institute published issue of Quarterly Bulletin *Vocational Education* for the period January to September, 2019. The bulletin comprises the events and activities organised in the institute and other important news during the period.



Annual Report 2018-19

The journey of NCERT, the apex organisation in school education, for the year 2018-19 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.



Annual Report 2019-2020





3. Research Studies

Research being one of its principal functions, the NCERT undertakes, promotes and co-ordinates educational research on various aspects of school education and teacher education. On the basis of the insights gleaned through the research studies and innovations carried out, the NCERT plays a pivotal role in informing policies and programmes to bring about desirable changes in the education system. During the year 2019–20, the NCERT has undertaken various research studies to explore the challenges faced by the teachers integrating pedagogical content knowledge in science teaching, pedagogical processes in Urdu language in *Madrasas*, learning environment in primary schools practicing Art Integrated Learning, inclusiveness of schools, education of children with disabilities due to chronic health impairments, implementation of three-language formula, relationship between perception of school climate and students' outcomes, implementation of intervention strategies and its effectiveness in the achievement of learning outcomes in science at upper primary stage, participation and performance of girls in National Talent Search Scheme (NTSS), status of girls' hostel scheme, policy research on education and skill development from the perspective of gender equality in India and Korea, student internship programme, quality learning in science, sustainable development, Global Citizenship Education (GCED), pre-primary teacher education programme of India, implementation of vocational education, stereo chemistry and reaction mechanism in organic chemistry, effectiveness of virtual laboratory, implementation of social science pedagogical training programme, on Porta Cabin School of Chhattisgarh State, reorganisation and merger of schools in the context of the RTE Act, 2009, Art Integrated Learning, Evaluation of D.El.Ed. Programme, etc.

Under Educational Research and Innovations Committee, during the year research reports on investigating the root causes of under-achievement among gifted under-achievers and adapting trifocal model for reversing their under-achievement, language across the curriculum pedagogy on students' learning, implementation of rubrics-based assessment of automobile technology vocational subject under NSQF, work education and entrepreneurial intention among the commerce students, existing pedagogical practices, issues and challenges of inclusive education, education scenario in Sikkim— potential of participatory communicative approach, pedagogical content knowledge on arithmetic for primary teachers of Mizoram, use of assistive technology of enhance literacy skills in children with learning difficulties and concept map recommendation system for student learning and evaluation have been completed.

DEPARTMENT OF CURRICULUM STUDIES

Challenges Faced by the Teachers Integrating Pedagogical Content Knowledge in Science Teaching

This qualitative research study was conducted to understand how teachers integrate pedagogical content knowledge in teaching Science curriculum by closely observing their classroom transactions and the challenges faced by them during the process. Thirty teachers were selected from three districts of Andhra Pradesh and case study approach was used. Results indicated that— (a) majority of the teachers had the understanding of teaching methods, i.e., pedagogy and content knowledge but the integration of these two was lacking; (b) there is a gap in the lesson planned and its execution; (c) what the teachers teach and what they think they teach have a wide gap. Most of them assumed that students are learning and that their efforts are enough; (d) the students were never informed of what and why they should learn the concepts while teaching; (e) though the teachers despised lecture mode, they were still in the same loop of lecture mode; when it came to implementation of activity-based education, teachers misunderstood the concept of activity, and most of them found it equivalent to demonstration; (f) teachers had assumptions that their efforts were enough for students to excel; (g) the teachers were imposed to teach in all schools in english medium only, this language problem widened the gap of interactions between students and teachers; (h) teachers were skilled but there was ground level confusion when it came to connecting links between intended, transacted and assessed learning of the students; and (i) the challenges faced by the teachers that were pointed out by them included student negligence, lack of resources, class strength, pressure for results from administration, lack of interest among the students and difficult textbooks.



Students conducting an activity with iron fillings and Magnet

DEPARTMENT OF ELEMENTARY EDUCATION

Improving Quality of Education through Learning Outcomes— A Status Study on Implementation of Learning Outcomes

The research was undertaken to study the implementation of learning outcomes in different States and UTs. The study was conducted at all India level and data was collected through a comprehensive questionnaire. The findings of the study indicated that States and UTs are implementing learning outcomes at different paces. Majority of the States have made the learning outcomes available in



all the schools, completed training and capacity building programmes for monitoring the functionaries, master trainers and teachers. However, schools and the administrators are still struggling in aligning the classroom processes and assessment practices with the achievement of learning outcomes. They are also making changes in their implementation plans on the basis of results obtained from the field. The report presents a firsthand view of the initial implementation of Learning Outcomes.

A Study of Conceptual Understanding of Mathematical Concepts forming the basis of Learning Outcomes

For the study of conceptual understanding of mathematical concepts forming the basis of Learning Outcomes, a conceptual framework was prepared along with the tools for collection of data. Test items were prepared to analyse the understanding of the students of Classes III, IV and V about a particular concept in accordance with the LOs along with tools for classroom observations. The sample comprised schools of Bhopal and Ajmer from different regions like urban, rural, etc. The data have been collected from DMS, Bhopal and DMS, Ajmer, Middle School, Sirari, Ichhawar Block of District Sihore, Madhya Pradesh and schools of Hurda Block of Bhilwara district, Ajmer, Rajasthan.

It was observed that students learnt the facts/statements/results as it is, but often failed to justify their understanding. Concept of length (Measurement) in Class III and concept 'Exponents and power' in Class VIII demands high attention as responses were poor. It was observed that classroom teaching was done through lecture method and students were generally passive listeners.

DEPARTMENT OF EDUCATION IN LANGUAGES

Study on Implementation of Three-language Formula

The objectives of the research were to find out the status of implementation of languages in school education policy, number of languages available or taught in various school system across the States and the national level education system, language of learning or medium of instruction and the status of tribal, minor, minority and classical languages in schools. Questionnaires have been administered to collect data from SCERTs, Education boards, etc. Data have been collected from students, teachers, parents, principals. Out of the 28 States responded, Arunachal Pradesh, Nagaland and Sikkim used English as medium of instruction. Many languages were taught in the school curriculum. Manipur offered 21 languages, Nagaland 20 languages and Sikkim 14 languages. It was found that all the States and UTs implemented three language formula. They provided many options like, Sanskrit, Hindi, Urdu, Punjabi, Marathi, etc. North-Eastern States have options of tribal languages. South Indian States like Kerala and Telengana offered Hindi, but other States did not offer South Indian languages as options. The basic premise and spirit of three language formula were not strictly found. The JNVs have implemented the formula in true spirit. SCERTs, students, parents, teachers and Principals opined that learning many languages is good, but for effective implementation of three language formula, teachers should be appointed to teach languages, in general and third language, in particular.



A Study of the Pedagogical Processes in Urdu Language at Elementary Level in Madrasas

The research was undertaken with the purpose to study the classroom teaching-learning process in Urdu language in *Madrasas*, to ascertain the areas of improvement and to analyse factors that support Urdu language in *Madrasas*. *Madrasas* from the districts of Bhopal and Indore from Madhya Pradesh and Guntur and Kadappa from Andhra Pradesh were selected for the study. The research tools such as *Madrasas* profile, classroom observation schedule, interview schedules for teachers and students and teachers' questionnaire were used for the study. The study reveals that *Madrasas* are generally known for religious teachings just like any other religious teaching institute. At present, *Madrasas* are low budget institutions that provide education to those classes of the society who can't afford high cost education. The *Madrasas* teachers are not getting any kind of orientation programmes for updating their teaching-learning strategies. However, It is visible that there are appropriate academic environment for teaching-learning process.

Researching the English Language Classroom with the Teacher

The study explored the English language classrooms from the States of Rajasthan, Haryana, Uttar Pradesh, Delhi and Uttrakhand, Kendriya Vidyalaya Sangathan schools and Navodaya Vidyalaya Samiti. The major objectives of the research were to support the teachers in exploring their own classrooms for enhancing their classroom teaching. Thirty teachers from the States carried out their research with the face-to-face in consultations with NCERT faculty. Major findings of the research include: Teachers who were conscious of their learner, learning and the context, were able to identify their problems and address them. It was concluded that teacher reflection leads to learning and re-culturing of what has been learnt from various sources including training programmes. Also, the need for having competency in Pedagogical Content Knowledge was found to be a requisite for addressing the needs of learners.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

A Study of Inclusiveness of Schools at the Elementary Level

The study was conducted to assess the progress in implementation of inclusive education in schools. Case studies of selected schools in different regions of the country covering rural and urban schools were undertaken to assess the status of inclusiveness in these schools. The result highlighted the status of the selected inclusive schools and the need for improvements to be made in this direction. The findings also indicated lack of resource support, poor preparedness of teachers and no valuable changes in the system to reasonably accommodate the diverse needs of children. Initiatives like better in-service training, drawing linkages between different stakeholders, counselling the parents to send their children to school regularly, sensitising the peers and above all, creating a welcoming and enabling environment were some of the recommendations that were made. It was concluded that presently the schools had to develop significantly in various spheres for providing equal opportunities and to be inclusive for all children.



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

The research project was undertaken with the objectives to explore the nature and severity of Chronic Health Impairments (CHI) (Multiple Sclerosis, Haemophilia, Thalassemia, Sickle Cell Disease) and to identify the difficulties in learning faced by these children. The study also analysed the existing educational interventions on learning outcomes of these children. The researchers interacted with children with Thalassemia, Sickle Cell Disease and Haemophilia, their parents, teachers, family members and doctors in New Delhi, Maharashtra and Gujarat. Research tools, viz., case history performa, interview schedule for parents, children and health care providers and a questionnaire for teachers were used for the study. Twenty-seven case studies were conducted. Findings revealed that children affected with CHIs were facing difficulties in coping up with the curriculum due to persistence absenteeism from classes for a week to 15 days in a month to attend frequent and complex treatment procedures. Shifting of school, school drop-out, absence of disability certificate, etc., were also found. Teachers and parents were unaware about the conditions of these CHIs, its implications on child's health, education and life style. They were also not aware of their rights, entitlement, certification of disability and government provision for their medical treatment, education and social welfare. Schools did not have any specific teaching-learning intervention plan for their regular absenteeism. Children were not encouraged to participate in the physical activities since they get tired soon or being prone to illness and injury. Few parents could afford tuition at home to compensate for the Classroom academic activities. The study suggested for awareness materials, handbooks and guidelines for teachers and other stakeholders on children with different CHIs so as to provide quality education to the children.

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 aimed at identifying the causes of gender gap and suggesting strategies to improve the participation and performance of meritorious girls. The research data was mostly collected through questionnaire and interview method. Preliminary findings show that the nature of questions in board examination and competitive examination viz., NTS is quite different; school teaching is not suitable for 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, syllabus is quite different in States and National Boards like CBSE. Hence, for level I, students have to prepare from State syllabus while for level II from the national level syllabus. Majority of the girls stated spreading awareness among parents and society, providing encouragement and equal opportunities to girls will go a long way to break gender stereotypes.



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

The research was conducted with the objectives to analyse the education and skill development policies in India and South Korea to identify the initiatives taken by both the countries to bring gender equality and transform the scenario into gender-based society. The outcomes are expected to help in formulating more gender just policies and plans in future. The study reveals that patriarchy and gendered role expectations are still prevalent in the South Korean society. The Republic of South Korea has made the Home Science course compulsory for boys. Such an initiative can be very useful for India. Similarly, more focus on gender equality is required in teacher education programmes of South Korea and recognising education as basic tool to transform society could be useful for South Korea. Making schools zero tolerance zones against gender violence will be useful for both the countries.

Status of Girls' Hostel Scheme: An Exploratory Study Focusing on Scheduled Caste Girls at Secondary Stage

The objectives of the study were to examine the infrastructure facilities; role of the scheme in enhancing the enrolment and retention of girls belonging to Scheduled Caste in the catchment areas; perception of parents and students; and suggesting strategies for better implementation and improvement of the scheme. The findings of the field visit to Gujarat and Assam revealed that the scheme has helped in enhancing the enrolment and retention of the girls from the SC community; girls did not experience any caste-based alienation during their stay. Need for trained female security guards having safeguarding equipment were expressed. The parents and the girls felt that there should be provision of academic support to the girls in the hostel as they have to appear for their board examination. Provision of vocational training in the hostel will help in skill development for economic empowerment. The girls expressed the need for facilities like sports, library, coaching and recreational activities in the hostels visited.



Researcher interacting with the students of KGBV Goalpara in Assam





The research team in conversation with the State officials of Assam

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

A Study on Professional Development of PGT Economics

The study analysed the factors which promotes or hinders professional development of the economics teachers. Economics teachers from the States of Maharashtra, Goa, Gujarat, Delhi and Punjab were interviewed and their classrooms were observed. The study reveals that teachers who have B.Ed. degree are more professionally developed. Teachers attach more weight to the print media than the use of ICT for teaching economics.

Teachers who participated in the study reported that the experts who take classes of in-service courses need to engage teachers in different session's activity. Also, sessions in each programme need to be completed as per the schedule. Experts need to engage economics teachers actively by working with subject content and pedagogies and explain the latest trends emerging in the field of economics. Teachers also said that they get enriched themselves while discussing in the classroom, reading books, engage in collaborative activities such as discussion with their peer groups, parents, participating in seminars, conferences, workshops, receiving and sharing ideas by forming economics teachers' network and study groups. These activities need to be promoted to facilitate professional development of the teachers.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Implementation of Intervention Strategies and its Effectiveness in the Achievement of Learning Outcomes in Science at Upper Primary Stage

The main objectives of the study were to assess the learning level of students in science at upper primary stage, to analyse the factors hindering the achievement of expected learning outcomes and to develop need based interventions for the teachers and students to achieve expected learning outcomes in science at upper primary stage. The study adopted triangulation method for the collection of data. The study finding shows that the teachers were not using appropriate



contextual resources and appropriate learning processes as per the need of different learners in an inclusive classroom. It was also seen that most of the teachers taking upper primary classes were untrained and not aware of the document of learning outcomes for the elementary stage developed by the NCERT.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

A Study of the Relationship between Perception of School Climate and Students' Outcomes

The study aimed at exploring the perception of students, teachers, principals and parents about the factors influencing school climate. It further examined the relationship between perception of school climate (i.e., safety, teaching and learning, interpersonal relationships, and institutional environment) and students' outcomes, both academic and affective. Sample of the study included boys and girls enrolled in Classes IX and X of government and private schools. A sizeable number of teachers, students, principals, and parents of government and private schools were also interviewed. Tools such as Students' Perception of School Climate, Students' Well-being Scale, and Interview Schedules for Principals, Teachers, Students, and Parents were developed. Results showed that teachers of government schools in different regions were satisfied with different aspects of the school climate, i.e., safety, interpersonal relationships, teaching and learning, and institutional environment. Private schools need to work on fairness in treatment of all the students. Teachers' sense of satisfaction with their work life was almost equal in both government and private schools, although, they suggested that there are few things in terms of material and practices which need to be changed. Government teachers expressed grievances related to their pensions. Students of both government and private schools appreciated the teaching-learning process followed in their schools. The findings of the present study will help to prepare guidelines to promote safe, caring, responsive and participatory schools as well as to improve educational and socio-emotional environment in such schools.

DEPARTMENT OF TEACHER EDUCATION

Critical Analysis of Student Internship Programme at Secondary Teacher Education Level

The research study was undertaken with an objective to study the status of Internship activity followed in pre-service teacher education programmes at the secondary level after the implementation of NCTE, 2014 regulations. The samples for the study were drawn from 10 secondary teacher education institutions from four States, viz., Delhi, Madhya Pradesh, Kerala and Bihar. The data were collected from 220 student-teachers, 42 mentor-teachers from the internship schools, 48 teacher-educators and 10 Principals from teacher education institutions of these four States. The data were collected using the tools such as Questionnaire for Student Teachers, Questionnaire for Mentor Teachers, Questionnaire for Teacher Educators, and Questionnaire for Principals. The major findings show that there is institutional variation in the duration of



Internship activities in first and second year; majority of the student-teachers were not aware of the organisation of pre-internship conference for mentor teachers and principals of internship schools at the institution; the mentor teachers and their support were not productive in most of the institutions and student-teachers were not satisfied with the support received from the mentor teachers; there were no proper guidelines for assessment of student-teachers in various activities of internship programme; and the enhancement of the duration of internship has not yet helped the institutions to plan the programme in an effective way and support the student-teachers continuously to prepare them as an effective teacher.

Interventions to Achieve Quality Learning in Science in related Schools in ST Dominated Districts of Nagaland: A Framework

This study was undertaken with the following objectives to assess the baseline situation in the selected schools, in terms of students' achievement, resource availability, teacher competencies in learning of science to identify the factors responsible for the low performance of the students in science, to design interventions to achieve quality learning in science and to study the effect of interventions on learning of science among secondary school students.

The districts and secondary schools of Nagaland were selected for the study based on the students' performance in science. Pre-test was administered to all the students of Class IX of the selected schools. The study revealed that the laboratories were not adequately equipped and the kits were not available for students. The students lacked motivation and the teachers followed chalk and talk method was mainly followed in the classroom. It was also revealed that the pedagogical and technological concerns were not integrated in the classroom. Other than the classroom teaching, other curricular activities related to teaching science was not conducted. The students were unaware of career opportunities in science. Participative leadership was also missing in the schools. As a result of intervention, the participative teachers started practicing science activities in the classroom, became aware of various career options in the field of science and started efforts for the integrating grating technology with pedagogies.

Enriching Teacher Education Institutions (DIETs) for Promoting Sustainable Development: A Pilot Project

The DIET, Sehore (Madhya Pradesh) and DIET, Shahpura, Bilwara (Rajasthan), which are in proximity of Blocks of Ichawar (Madhya Pradesh) and Hurda (Rajasthan), respectively have been adopted with the objectives to support DIETs to enrich teacher education for promoting Sustainable Development Goals (SDGs), and specifically training of teachers for advancing Education for Sustainable Development (ESD). The positive support and intervention is expected to bring the SDGs in the consciousness of learners and the teachers at early stages of school education to enable learners to facilitate learning about, learning through, and learning for the achievement of the SDGs. The enrichment of the teaching and learning activities will also enable teaching professionals and the learners to contribute and create critical mass to ensure lasting transformation in relation to sustainable development. While the efforts for realising different SDGs shall be continuing, the DIETs could provide



institutional mechanism as driver of transformation to support ESD goals with global vision with actions at the district level.

Various proforma/tools have been developed for the study of selected DIETs including questionnaires for SWOT analysis of DIETs, Student checklist, Observation schedule and guidelines for focused group discussion. Planning workshop with State and District functionaries from Icchawar block of the Sehore District was conducted with the objectives to have face-to-face interaction about the modalities for project implementation and to identify the strengths, weaknesses and also the threats and opportunities for academic interventions in respect of Education for Sustainable Development in DIET, Sehore. As a follow-up of it, the data have been collected from DIET, Sehore. The syllabi of D.El.Ed. programme of the DIETs of Madhya Pradesh and Rajasthan with reference to Education for Sustainable Development were analysed. On the basis of it, an action plan was prepared for required interventions/enrichment of DIETs in respect of ESD in discussion with experts and the functionaries in DIETs, SCERT as well as District and State level officials.

A poster competition on themes related to Sustainable Development for DIET students was organised. Also, a three-day orientation programme was organised for academic intervention for quality improvement at elementary level in Icchawar block at three centres in which all the teachers of Classes I to VIII from all the ten clusters participated. A total of 549 teachers and 165 prospective teachers participated in the programmes and were sensitised about the Education for Sustainable Development.

A Status Study of Pre-primary Teacher Education Programme of India

There is a large variation in preparing teachers for formal pre-primary schools, though NCTE prepares norms and curriculum framework for pre-primary teacher education. The framework and norms are not followed uniformly by all institutions in the country, including a large number of such institutions that are in private sector. This in turn, affects the quality of teacher education programmes. There is a need to explore whether the pre-primary teacher education institutions are following these norms. The study was conceived on this backdrop and tried to explore the existing pre-primary teacher education curriculum in India, the status of curriculum revision and the constraints experienced by the states in organising pre-service teacher education programmes. The database generated shall help the policy planners in designing and implementing suitable interventions. The main objectives of present study were to study the nature of Pre-primary Teacher Education in the country; study the teacher education curricula at Pre-primary level in different states; analyse the course structure and course content; and its relevance to present context in different states; analyse the school experience/practice teaching programmes being followed in different institutions in these states; identify/analyse the issues pertaining to pre-primary teacher education programme including constraints experienced by these institutions in different states in the region; investigate the availability and utilisation of infrastructure, human resources and financial resources in the pre-primary teacher education institutions and suggest suitable interventions for introducing desired changes in the curriculum and implementation of teacher education programme in the



different states in India in light of recommendations of NCTE, 2009 and NCTE Regulation, 2014.

The study has been carried out covering all regions of India using survey method with collection of quantitative and qualitative data. The quantitative data was collected with the help of questionnaires. The Questionnaires (for Principal/teacher-educators/teachers) were mailed to all the NCTE recognised private and government-run pre-primary teacher education institutions and the State Education Departments having pre-primary teacher education programmes in the country in rural and/or urban areas. Data was collected from 30 institutions and 135 teacher-educators from institutions in different States. The visits were also made to collect information on various dimensions of teacher education such as the admission criteria, curriculum/course structure, duration of course, transactional procedures, school experience programme, assessment procedure, professional preparedness of faculty members, research and innovations undertaken by these institutions, infrastructural facilities, and financial and academic constraint, etc. During the analysis of the data, the quantitative data has been corroborated and strengthened through analysis of qualitative data obtained through field visits to identified (*sample*) institutions by the investigating team members and holding focused group discussions, and interviews with the faculty members, student teachers and other stakeholders. The data obtained through quantitative and qualitative methods have been triangulated and given suitable statistical treatment to arrive at conclusions. The study points out towards the shortcomings in the programme like, almost no opportunity for the in-service teacher and wide variation in curriculum and administration of the programme in different states. There is need for standardisation of different aspects of the pre-school teacher education programme.

DIVISION OF EDUCATIONAL RESEARCH

Research Reports Completed under ERIC

The following ERIC projects were completed and reports received.

S.No.	Title of the Project	Principal Investigator
1.	Investigating the Root Causes of Under-achievement among Gifted Under-achievers and Adapting Trifocal Model for Reversing their Under-achievement	Dr Supreet Kaur USOL, Punjab University Chandigarh
2.	A Study of Language Across the Curriculum Pedagogy on Students' Learning	Kirti Kapur, <i>Professor</i> NCERT, New Delhi
3.	A Study of Implementation of Rubrics Based Assessment of Automobile Technology Vocational Subject under NSQF in the Selected Schools of Haryana and Himachal Pradesh	Saurabh Prakash, <i>Professtor</i> PSSCIVE, Bhopal Madhya Pradesh
4.	Work Education and Entrepreneurial Intention among the Commerce Students in Higher Secondary Schools in Imphal, West District, Manipur	Kh. Devananda Singh North-Eastern Hill University Tura Campus, Meghalaya



5.	Study of Existing Pedagogical Practice, Issues and Challenges of Inclusive Education in Chandigarh	Harpreet Kaur <i>Principal</i> Sri Guru Harkrishan Model School, Chandigarh
6.	Primary to Senior Secondary: Education Scenario in Sikkim— Potential of Participatory Communicative Approach	Pema Subba SCERT, East Sikkim
7.	Development of a Framework of Pedagogical Content Knowledge on Arithmetic for Primary Teachers of Mizoram	Lokanath Mishra Mizoram University, Aizwal
8.	Use of Assistive Technology of Enhance Literacy Skills in Children with Learning Difficulties	T. Geetha Avinashilingam Institute for Home Science and Higher Education for Women Coimbatore
9.	A Concept Map Recommendation System for Student Learning and Evaluation	Sunu Mary Abraham Rajagiri College of Social Science, Kalamassery Kochi, Kerala

ERIC-RESEARCH STUDIES

Study of Existing Pedagogical Practices, Issues and Challenges of Inclusive Education in Chandigarh

The research aimed to identify the most appropriate teaching practices for inclusive education. It dealt with the issues and challenges faced by the educators while accommodating children with special needs in regular classroom teaching-learning practices and on the importance of training for teachers and principals for dealing with children with special needs. The sample for the research was purposively selected from 28 government secondary schools located in 9 clusters of Chandigarh comprising 240 teachers and 28 principals dealing with children with special needs from Classes I to VIII. Semi-structured questionnaires for both teachers and principals, focused group interviews, pedagogical practices for Inclusive Education (PINDICES) developed by NCERT, and observation schedule were used to examine the pedagogical practices of teachers in the classroom. The discussion was conducted with resource teachers and teachers teaching children with special needs from each research site which were selected to participate in the study. Case studies helped to explore in-depth practices followed by schools for inclusive education, which highlighting the infrastructure facilities, aids and appliances provided to the CWSN, resource centres, teaching aids, additional services, teaching aids and instructional practices.

The findings of the research revealed that teachers are well aware about inclusive education and concur with the need of equal opportunity for children. Some of the attempts made by teachers were: prepare separate worksheets for children with special needs as per their disabilities, use co-operative method, task analysis, visual aids, and giving concrete examples related to content. In addition, teachers use story-telling method, practice in smaller units, use drill method and questioning techniques to create interest and



draw attention to the lesson. Teachers opined that they need special training in curriculum adaption and on screening and identification of the special children. The findings also indicated that Principals supported enrolment of all children without any discrimination and also providing more facilities to special children. The research highlighted need for organising short-term and long-term training for both teachers and principals focusing on providing practical experiences related to inclusive education. It also emphasised to have a proper mechanism of screening, identification and certification of CWSN to be undertaken on a regular basis. It further recommends that the services of full-time counsellor and special educator should be made compulsory in all schools along with improving infrastructure facilities such as ramps, modified toilets and sign board.

Use of Assistive Technology to Enhance Literacy Skills in Children with Learning Difficulties

Children with learning disabilities usually face difficulty in acquiring the basic skills of reading, writing and arithmetic in regular classroom interactions. The research highlights the importance of assistive technology in enhancing literacy skills among the children with learning difficulties. The objective of conducting this research was to enhance the literary skills of children with difficulties using assistive technology both available and adopted specifically at the primary level. In simple words, assistive technology is any device, software, or equipment that helps people work around their challenges so they can learn, communicate, and function better. Some examples of assistive technology are wheelchair, text-to-speech and word prediction. Assistive technology includes low-tech tools, too, like pencil grips, software that reads aloud text from a computer or a keyboard for those struggling with handwriting.

Primary level students at risk for learning difficulties were identified from seven schools in urban areas of Coimbatore; two each from government and corporation schools and three from government aided schools. Total sample of 606 students comprising of both boys and girls studying in Classes III, IV and V was selected on the basis of performance in pre-test and achievement grades in Mathematics, Tamil and English languages.

An assessment tool based on the review of textbooks of primary level (Classes III, IV and V) Tamil, English and Mathematics was developed. The tool helped in assessing the literacy skills of students in Tamil and English (Reading and Writing) including Mathematics (General and Computational). Grade Level Assessment Device (GLAD, 2003) by Narayan-(NIMH) was used as a base line for development of the present Literacy Assessment tool for the research.

The Technology Assisted Learning (TAIL) tool was developed with the help of experts in the department of special education and department of education. The major component of the software developed comprised three modules for Tamil, English and Mathematics; each of the modules was developed on the basis of analysis of government Textbooks in Tamil, English and Mathematics for Classes III, IV and V and on the basis of the error observed in the pre-test using the Developed Literacy Assessment Tool. The tool provided a comprehensive learning environment for the students with learning difficulties that can also improve their observation capacity. Individual and group teaching sessions were conducted for the students to develop their listening and learning skills.



Peer group interactions were used to develop the social interaction skills within a group. During the research, periodic assessment was done for each student to assess their learning achievement and progress made on the intervention inputs. A three month intervention was provided.

After the intervention, it was found that the achievement level of students was enhanced. Along with that an observation was made that the students who were securing less than or below 35 per cent were just 10 per cent of the population as per the school records and literacy assessment test. Findings indicate that the student's performance in Mathematics was relatively higher than Tamil; the student's mother tongue and English their second language. Gender differences were observed; boys scored relatively higher (above 63 per cent) than girls both in Tamil and English at Classes III and V levels. But in Mathematics, there was not much variation in terms of gender, thus revealing either their interest in the subject or the impact of the teaching methodology plays a major role in the achievement levels.

The research has implications for teachers to use the Assistive technologies in improving the literacy skills among young children. Assistive technology as a strategy needs to be used for enhancing literacy skills in Tamil, English and Mathematics of students at primary level, aiming at expected learning outcomes.

Functioning of SMDC in Planning, Management and Supervision of Secondary School Activities in Tribal Areas of Odisha under RMSA

The research examined the functioning of SMDC in terms of planning, management and supervision of secondary schools in the tribal areas of Odisha. SMDC, i.e., School Management and Development Committee is elected by representatives of teachers, parents or guardians; ex-officio members of PRIs, DPC/DEO nominated members, village education committee and self-help group members of the local community of children admitted to all government aided secondary schools. This elected body is constituted to encourage community ownership in planning, management and supervision of academic and non-academic activities of the school. It is responsible for making the perspective and annual work plans at the school level. The committee is responsible for all educational activities, planning, management, monitoring, supervision, quality education, equity, children with special needs, student-teacher attendance, teacher training, guidance and counselling, student achievement and curricular activities.

The research on SMDC was basically an evaluative study which critically explores SMDC, its impact on education standards and causes of the hindrances which hamper the mobilisation of the education in the tribal areas. The study employed convergent mixed method as primary design to collect both qualitative and quantitative data. Sample of 354 SMDC members, 60 non-member teachers, 60 non-member parents, six government functionaries and 300 students of Classes IX and X from 30 secondary schools of six blocks and three tribal districts of three administrative division of Odisha were selected by stratified random sampling. Data collection was done with the help of six different tools, i.e., one school information schedule, four interview schedules and one focus group discussion schedule.

The findings indicated that a high majority of schools had not formed any sub-committee within the SMDC and the members other than teachers were



not aware about SMDC formation procedure as well as its process related to conducting meetings. It was further revealed that the external members were not aware about the specific objectives of the SMDC and perceived it as the one focusing on the enrolment of children, effective functioning of the school and motivating parents to become active participants in school activities. In addition no proper intimation about the purpose of the SMDC meetings was done to external members. Although most of the schools have developed ramp facilities by the government aid for education of Children with Special Needs (CWSN) but there was no provision made by the DEO (District Education Office) office regarding other specific infrastructure or instructional materials for the children with special needs.

The findings of the study recommended that— (i) the state must prepare model bye laws for the administrative exigency providing clear guidelines regarding the procedure and principles for the formation of SMDC, (ii) a teacher must be appointed as a SMDC co-ordinator from each block by the ADEOs for facilitating and monitoring monthly SMDC meetings, (iii) proper orientation of Heads and teachers for dealing with outside SMDC members, (iv) encouraging participation of women members, (v) mandatory school visits by each SMDC members, (vi) formation of academic sub-committee within the SMDC, and (vii) conducting capacity building programmes for all new SMDC, members, training of DPC and DEO.

A Concept Map Recommendation System for Student Learning and Evaluation

Concept map is a proven graphical tool which people use to visually represent and organise a particular topic or knowledge. They are diagrams that use words, phrases and sometimes images to show the relationships between ideas or information. The research highlighted the possibilities of evaluating students using a concept map which extracts genuine understanding of facts from the students for the topic under study.

The goal of the project was to explore the studies in the field of concept maps in early education and identify the gaps, develop a tool for constructing a concept map and evaluation tool with an automated scoring strategy for evaluating the concept maps constructed by the student against a master concept map developed by the instructor. Since the tool has been developed for school students, a simple interface has been designed where the students just need to drag the concepts from a basket of concepts and drop them under appropriate parent concepts, selecting suitable labels for linking with the immediate parent concepts.

The concept map construction and assessment tool was tested in a real classroom environment for Class VIII students to evaluate the effectiveness of the new framework. Thirty-two students participated in the test after learning the chapter “Sound” in the Science textbook based on NCERT syllabus. They were trained to use the tool before attempting the test. Class performance and individual student performance were analysed from the reports generated from the tool. The researcher identified weaker concepts for the class as whole and also for individual students by the click of a button. The students were given feedback on their performance in the test indicating the concepts they need



to give more thrust while reviewing the chapter. The results indicated that the automated grading of students for a specific topic reduced the time involved in assessing students. It also stated that through concept map, students weak in a particular topic can be easily identified and can be provided special tutorials.

It was recommended that a new tool can be developed to help the student and the educator to identify the areas where the student has gone wrong and accordingly can be given remedial sessions. Also a pre-test-post-test control group design may be employed to test the improvement of the students' knowledge with the use of concept map learning technique. A feedback technique which gives the student the score of each concept based on its structural correctness and linking phrases can be devised, to help them understand gaps in their learning and to rebuild their knowledge

Potential of Participatory Communicative Approach: School Education Scenario in Sikkim

The research focused on establishing the importance of participatory communicative approach as the key element in establishing a partnership between schools and other stakeholders. Participatory Communicative Approach is basically the capacity to involve human subjects of social change in the process of communicating, i.e., communication lies at the root of all human development in any context. It is instrumental in taking development to the doorsteps of the people covering a wide arena that not only includes agriculture, environment, health and other key areas but also education. The intend of the research was exploring the location and nature of the 'pro-school' communication networks in three different categories, i.e., government-to-school, school-to-government and school itself.

A pilot study was conducted in 80 schools including primary, junior high, secondary and senior secondary schools of 31 blocks spread across 4 districts in both rural and urban areas of Sikkim. The sample was purposive and comprised of population on the basis of different age groups, gender, economic and occupational profiles. The population for the research was parents, teachers, school administration officials from the education sector and government bodies.

The data were collected from two sources— primary and secondary. The data collected from primary sources included local field data and for secondary sources were official records and documents such as government reports, handbooks, government orders, books, articles, websites, notifications and gazettes. Field data were collected using both quantitative and qualitative methods. Both semi-structured and open-ended interviews were conducted along with in-depth interviews to gather perceptions of respondents on quality education (which included officials of Human Resource Department (HRD), Government of Sikkim (head office, district office, and block) and also officials and faculty of SCERT and District Institutes of Educational Training (DIETs). Focus Group Discussion (FGD) was used to gather data from parents, teachers, students, members of the School Management Committee (SMC) and Gram Panchayat (GP).

The findings of the research highlighted that participatory communication is a crucial platform of communication between students and schools, school



administration and policy-makers and also for parents and administration. ICT is being harnessed to bring about effective and planned communication aimed at achieving development. Also it was stated that democratic modes of communication have to be identified with a 'two-way' communication system that would help to establish a relationship with the schools for their involvement in the development initiative.

The study suggested need for adequate number of teaching and non-teaching staff for schools in far-flung areas, frequent visits of officials to the school, more investment in technology for effective teaching and learning, strengthening officials at the block level for better communication with the schools, installation of suggestion box in every school. The research highlighted the use of participatory approach by government for improving schools and learning.

A Study of Language across the Curriculum Pedagogy on Students' Learning

The research focused on the nature of ongoing classroom discourse across curricular areas like science, social science, mathematics and english), explored the teachers preparedness and understanding of LAC (language across curriculum) along with how children learn to use language as a tool for thinking, and how teachers used language to facilitate it. Two key aspects were explored in this study; first, the prime aim of education, i.e., to help children learn how to use language effectively as a tool for thinking collaboratively, and second, the classroom-based involvement in thinking collectively making significant contribution to the development of individual child's intellectual ability.

The researcher drew on classroom-based research wherein classroom talk was considered as a tool for learning across the curriculum.

The sample comprised of teachers, students and principals. The sample involved the primary stakeholders in the teaching-learning process. Five participating schools of Delhi, i.e., Kendriya Vidyalaya (KV), Jawahar Navodaya Vidyalaya (JNV), Rashtriya Pratibha Vikas Vidyalaya (RPVV), New Delhi Municipal Council secondary school (NDMC), and a private school— DAV Public School were selected. From the 5 schools, 8 classes were identified from each. Across the 40 classes, the study involved participation by students and teachers from Classes VI–VIII in the subjects English, Mathematics, Science, and Social Science. Across the various phases of the study, the level of the classes that were being observed remained consistent. As a result, comparative analysis of the control and experimental groups revealed concrete indicators of the status of critical thinking and classroom talk in LAC. The study was conducted on two groups: controlled and experimental group, using observational data from classroom observation of classroom practices. This study examined how classroom talk can be used as a resource to develop critical thinking, reasoning ability, problem solving, etc., across the curriculum which requires anticipating, inquiring, motivating, associating, representing things. The study was conducted in three phases, i.e., stakeholder mapping and interviews, teacher workshop to identify practical strategies and evaluating impact. Triangulation via observation-interaction-praxis was adopted as the primary methodological framework of the study. This approach lends validity and reliability to the pilot study through the use of multiple sources. Also the learning educational tasks or activities were developed to encourage classroom



interactions across curricular areas in the classrooms. This study revealed that the classroom talk was bilingual interaction.

The research findings indicated that the language option used by the teachers in the bilingual classroom interaction were influenced by several factors, such as teacher's linguistic competence, the views on the roles of the two languages in the bilingual interaction, teacher's interpretation on the instructional language use prescribed by the school management, and the teacher's educational background. The research findings on students talk stated that the students generally adjusted their language option in responding to questions as the language used by the teachers in asking questions.

This study emphasises the need for providing rich and varied language experiences, such as rational debates, logical deductions, reflective analyses, extended narratives and detailed explanations.

Work Education and Entrepreneurial Intention among the Students of Higher Secondary Schools in Imphal West District, Manipur

Entrepreneurial Intention (EI) is defined as the conscious state of mind that precedes action and directs attention toward entrepreneurial behaviours such as starting a new business and becoming an entrepreneur. The research focused to draw the factors that affect entrepreneurial intention, study the impact of independent variables with entrepreneurial intention, compare the entrepreneurial intention among Science, Arts and Commerce students and to draw the correlation between the curricula of streams and entrepreneurial intention among Science, Arts and Commerce students of Higher Secondary schools in Imphal West District, Manipur. The study elaborated on the need for entrepreneurship education in higher secondary schools in Imphal West District, Imphal, Manipur.

The influencing factors of entrepreneurial intentions were explored with entrepreneurial intention and their relationships with independent variables were examined. Stream-wise analyses of entrepreneurial intention were made. The study was exploratory in nature. The primary data for the study has been collected from the sampled students of Class XII from arts, commerce and science streams through a well-designed questionnaire. But, in the case of Science and Arts student respondents, the convenience method of sampling was adopted to attain up to 115 samples in each stream, leading to a total sample of 345. Personal interview method of data collection and Focus Group Discussion (FGD) with the respective teachers and students were adopted to collect more accurate data from the respondents. Correlation, non-comparative scaling techniques of data analysis, and Likert Scale under the 'Non-comparative scaling technique' has been used for the study. In addition to descriptive statistics, the study used Regression Analysis, Factor Analysis, and Analysis of Variance (ANOVA) to draw meaningful results.

From the research, it was found that the five factors, i.e., attitude towards the behaviour, subjective norm, perceived behavioural control, entrepreneurship education and personality traits had an effect on entrepreneurial intention of the students of science, arts, and commerce streams. Also, the personality trait was found as the predictor variable that contributes the highest to the variation of entrepreneurial intention. Despite the results indicating that there was no significant correlation between the curricula of all streams and entrepreneurial



intention among the higher secondary students, still from the three streams, the students of commerce stream have more entrepreneurial intention than arts and science stream students.

The study recommended incorporating more entrepreneurship-related curricula in all the streams of study in higher secondary schools as entrepreneurship education is the driving force behind the country's economy. Also, the research suggested regularly conducting Entrepreneurship Awareness Camp (EAC), Entrepreneurship Motivation Camp (EMC), Business Skill Development Programme (BSDP), and Entrepreneurship Development Programme (EDP) for the higher secondary students in their school campuses

Developing a Framework of Pedagogical Content Knowledge on Arithmetic for Primary School Teachers of Mizoram

The research focused on developing a framework on pedagogical content knowledge for primary school teachers teaching arithmetic. Pedagogical Content Knowledge (PCK) is a set of special attributes helping someone transfer the knowledge of content to others. It entails knowledge of how to structure and represent academic content for direct teaching to learners, knowledge of learners thinking, including the common conceptions, misconceptions, and difficulties learners encounter when learning particular content and knowledge of the specific teaching strategies that can be used to address learners learning needs in particular classroom circumstances.

The research intended to analyse the level of competency of primary school teachers in Mizoram, identify the difficulty level of arithmetic faced by the teachers, and the impact of pedagogical content knowledge on teachers' classroom experiences. The research formulated and described a PCK framework, which, in turn, was used to guide and support the professional development of the teachers.

From all the primary schools in the eight districts of Mizoram, only 20 primary schools and 160 primary school teachers (one from each school) were selected in order to investigate the teachers' competence, confidence, and the levels of support they received. Also, eight teacher-educators who were dealing with the pedagogy of mathematics from eight DIETs were included for the study. And one best school from each district was selected for implementing the framework on an experimental basis. The questionnaire was used for the teachers to examine the competence and the confidence that teachers have in the teaching of arithmetic. After that, based on the data that emerged from the baseline study, a PCK framework was developed for arithmetic with a workshop. The observation method was followed to understand how the emerging framework for the development of PCK for primary school teachers impacted the teacher's classroom experiences.

Findings from this research indicated that the complexity in teaching arises due to lack of conceptual understanding of teacher, lack of interest, and extended syllabus. It was also found that there is a need for regular curriculum revision from time to time so that problems faced by teachers and students can be resolved. The research highlighted that pedagogical content knowledge plays a vital role in preparing teachers for effective teaching and learning.



The research recommended for teachers' orientation and refresher programme with the right kind of pedagogy to handle difficult areas of arithmetic. Further, it recommended for inclusion of pedagogical content knowledge framework in pre-service and in-service elementary school teacher training programmes. The research suggested that the professional development programmes must provide atmospheres allowing autonomy to both teachers and learners to make teaching-learning interesting and fruitful.

A Study of Implementation of Rubric Based Assessment of Automobile Technology Vocational Subjects under NSQF in the Selected Schools of Haryana and Himachal Pradesh

Rubric based assessment is basically a tool that clearly indicates achievement criteria across all the components of any kind of student work, from written to oral to visual. It can be used for marking assignments, class participation, or overall grades of the students very effectively. The research examined the indicators for assessing knowledge, skill, and attitude of the students pursuing Automobile Technology Vocational subject, i.e., L-1. The competency of the students was also assessed using rubrics based assessment tools and portfolios. The learning outcomes were identified as per the session plan of various units of Class IX automobile technology student textbook and to implement the project effectively assessment guideline and session plan were prepared.

The NSQF funded schools of Haryana and Himachal Pradesh were selected for sampling. The Class IX students pursuing L-1 automobile technology vocational course were sampled for the research. Sessions on the importance of rubric based assessment in vocational education were conducted and feedbacks from various teachers of the sampled schools of Haryana and Himachal Pradesh about the reliability of rubrics were collected. Another session was conducted for the students' awareness regarding rubrics.

It was found that the analytical rubrics can be used to assess a single attribute or continuous progress of students and the holistic rubrics can be used to assess the overall performance or product of the students. It was also stated that there is an urgent need for teachers' training in terms of pedagogy, assessment, and evaluation in the technical area. Also, it was observed that the rubrics were easy to implement and it helped teachers in the goal-oriented assessment. It was also found that the rubric based assessment helped the students in improving their learning.

As rubrics based assessment is new for the Indian context, effective evaluation is possible after integrating rubrics with the curriculum. It was strongly recommended that vocational courses should be assessed by Rubric based Assessment system. Competency assessment can be focused on the rubric based assessment and students' profiles can be prepared using portfolios and rubrics. Also, a book or format for portfolio-based assessment for assessing competencies like knowledge, skill, and attitude can be designed and developed keeping the Indian curriculum in mind. Along with that rubrics can be integrated with Recognition of Prior Learning (RPL) for competency identification of the students.



On-going ERIC Research Projects

The following ERIC projects continued during the year under report.

S.No.	Title of the Project	Principal Investigator
1.	An In-depth Study of Implementation of English Language Curriculum in All Stages of School Education	R. Meganathan <i>Assistant Professor</i> DEL, NCERT
2.	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
3.	Development of Phonological Processing Assessment Tool for Primary School Children	Jayashree S. Bhat Manipal University, Mangalore
4.	Impact of Stress, Anxiety and Physical Activity on the Academic Performance of School Children	Annie Thomas JSS Hospital Campus Ramanuja Road, Mysuru Karnataka
5.	Cultural and Psychological Factors in the Education of Kharwaradivasi Children	Yogesh Kumar Arya BHU, Varanasi, UP
6.	The Implementation of Inclusive Education in Kashmir Province of Jammu and Kashmir State	Amina Parveen University of Kashmir, Srinagar
7.	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
8.	An Explanatory Study on Triadic Social Interactions within School Social Geography in Tribal Areas of Kerala	Justin P. Jose Dharmagiri Jeevas Social Centre District Kannur, Kerala
9.	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
10.	A Study of Equity and Inclusion in Education of <i>Gujjars</i> and <i>Bakerwal</i> (Scheduled Tribes) of Kashmir Division	M.Y. Ganai University of Kashmir Srinagar
11.	Developing Multimedia Package of Local Folktales and its Impact on Functional English of Rural Children	N. Vasuki Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore
12.	Impact of Mothers' Work under National Rural Employment Gurarantee Act (NREGA) on Pre-school and School Education: A Comparative Study of Haryana and Tamil Nadu	P. Geetha Rani University of Tamil Nadu Thiruvavarur



13.	Exploring the Culture of Learning Based on <i>Nai Talim</i> : A Case Study of Aanand Niketan School	Rishabh Kumar Mishra <i>Assistant Professor</i> Department of Education Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya Wardha
14.	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
15.	Development of Phonological Assessment Tool in Kannada	Veena K.D. School of Allied Health Science Mahe, Manipal
16.	Developing a Standardised Intervention Programme for Teachers for Mentoring Students At-Risk	Narayanan Annalakshmi <i>Professor</i> Department of Psychology Bharathiar University Coimbatore, Tamil Nadu
17.	A Comparative Study of Status of Awareness of RPWD Act, 2016 for Inclusive Education in Government and Private Schools of Chandigarh, Panchkula and Mohali	Sneh Bansal <i>Head Department of Education</i> Chandigarh Group of College Landran, Mohali, Punjab
18.	A Case Study Approach to Explore 'Ownership' of the Students in the Process of Constructivist Approach of Learning and Achievement in Secondary School Science	Biswajit Behera <i>Assistant Professor</i> Department of Education School of Education Central University of Punjab
19.	Development of Alternative Assessment Strategies for Science in Constructivist Classroom at Elementary Level and its Impact on Cognitive and Affective Outcome	Jubilee Padmanabhan <i>Assistant Professor</i> Department of Education Central University of Punjab
20.	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 Dindigul District, Tamil Nadu
21.	Mangroves of Godavari and Krishna Estuarines— An Educational Manual Development and Implementation on Rural School Students	D. Suresh <i>Registrar and Secretary,</i> Mahatma Gandhi National Institute of Research and Social Action (MGNIRSA) Hyderabad



22.	Effectiveness of Vernacular Language Education on Primary Level in Tribal Districts in Odisha State	Laxmikant Paikray Social Welfare Organisation for Rural Development (SWORD) Bhubaneswar, Odisha
23.	Analysis of the Impact of Inculcating Human Values among Rural Elementary School Children	K. Manimozhi, <i>Professor</i> Department of Resource Management Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore

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

Two meetings of the Screening-cum-Progress Monitoring Committee of ERIC were held on 25–26 July, 2019 and 10–12 February, 2020 at NIE, New Delhi. There were 34 proposals identified for interview-cum-presentation for financial support under ERIC. Sixteen research projects were recommended for funding under ERIC.

SPMC Meeting: 25–26 July, 2019		
S.No.	Title of the Project	Principal Investigator
1.	Empirical Investigation of Status of Ashram Schools and its Impact on Education of ST Children in Karnataka State	D.C. Nanjunda <i>Assistant Professor</i> University of Mysore Karnataka
2.	Exploration of Culturally Relevant Teaching to Develop Science Process Skills and Knowledge among Tribal School Students of Class VI in the State of Madhya Pradesh	Ramesh M. <i>Assistant Professor</i> Indira Gandhi National Tribal University, Amarkantak, Anuppur Madhya Pradesh
3.	Adaptation of Indian Folk Games to Increase Physical Activity and Academic Performance in School Going Children with Cerebral Palsy Aged 5–8 Year	Mansoor Rahman <i>Assistant Professor</i> JSS College of Physiotherapy M.G. Road, Mysuru Karnataka
4.	Development and Evaluation of A Structured Reading Programme (SRP) and Training Teachers for Improving the Reading Competency of Lower Primary Students	N. Dhanya <i>Assistant Professor</i> Department of Home Science St. Teresa College Eranakulam, Kerala
5.	Effectiveness of Training Teachers of Regular Schools of Execute Classroom Remedial Programme for Children at Risk of Dyslexia	Suma R. <i>Professor</i> JSS Institute of Speech and Hearing M.G. Road, Mysuru



6.	Cross Sectional Study of Story Based Assessment of Cognitive Communicative Abilities in Preschool Children	Malavika Anakkathil Anil <i>Assistant Professor</i> Kasturba Medical College Light House, Hill Road Hampankatta, Mangaluru Karnataka
7.	The Effectiveness of a Capacity Building Education and Training Module on the Caregivers of Children with Cerebral Palsy through a Family Centred Approach on the Quality of Life and Family Empowerment	Deepalaxmi Paresh Poojari <i>Assistant Professor</i> Department of Physiotherapy Manipal
8.	A Study on the School Teachers' Understanding of Climate Change Issues and Attitude towards, and Practices on Green Life Style	M.K. Satapathy <i>Dean (Academic)</i> RIE, Bhubaneswar Sachivalaya Marg, Odisha
9.	A Study of the Effectiveness of Integration of Digital Media Technology in B.Ed. Teacher Education Curriculum	C. Thanavathi <i>Assistant Professor</i> V.O.C. College of Education, Tuticorin Tamil Nadu
SPMC Meeting: 10–12 February, 2020		
10.	Functional Efficiency in the Performance of the Selected Rural Government Schools in Dindigul District of Tamil Nadu	P. Ponnusamy <i>Assistant Professor</i> Department of Education Gandhigram Rural Institute (Deemed to be University), Gandhigram Tamil Nadu
11.	Ergonomic Intervention in the Classroom Environment for Enhanced Learning	Prabir Mukhopadhyay <i>Associate Professor and Head</i> Design Discipline PDPM- Indian Institute of Information Technology, Design and Manufacturing (IIITDM), Jabalpur
12.	Effectiveness of Video Assisted Teaching v/s Planned Demonstration Programme on Knowledge and Competency in Selected First Aid Measures among High School Students of Mysuru City	Vidya M. <i>Assistant Lecturer</i> JSS College of Nursing, Mysuru Karnataka
13.	Development of Manual for Identification of Species in Mangrove Regions and its Implementation	Divya Deepthimhanthi <i>Assistant Professor in Zoology</i> St. Ann's College for Women Telangana
14.	Investigating the Differences in Scientific Epistemic Beliefs, Conceptions of Learning Science and Self-Efficacy of Learning Science between Taiwan and India: A Cross-Country Study	Kaushal Kumar Bhagat <i>Assistant Professor</i> Indian Institute of Technology Kharagpur



15.	Problem Based Learning Method to Teach Science Concepts among Tribal Children	Sudha A. <i>Assistant Professor</i> in Special Education Ramakrishna Mission Vivekananda Educational and Research Institute SRKV Post. Periyanaickenpalayam Coimbatore
16.	Evaluation as a Teaching Method: A New Pedagogical Model to Improve Knowledge and Critical Thinking among Students	Reena Cheruvalath <i>Associate Professor</i> Dept. of Humanities and Social Sciences, BITS, Pilani K.K. Birla Goa Campus

NCERT Doctoral Fellowship

A meeting of Screening Committee to award Doctoral Fellowships was held on 10 January, 2020. Total 101 applications were received, out of which 63 applicants were invited for interview-cum-presentation meeting held at NIE, New Delhi on 11–12 February, 2020. The Committee recommended awarding of Doctoral Fellowships to 10 candidates pursuing their Ph.D. research in different universities across the country. In the current year, 10 candidates were selected for fellowship and four have been waitlisted.

NCERT Research Associateship (Educationists’ or Researchers’ Pool Scheme)

The NCERT Research Associateship (Educationists’ or Researchers’ Pool Scheme) has been initiated to utilise the experience and understanding of young educationists or 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. The 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 Research Associates are expected to undertake some projects(s) 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 the NCERT website. Around 11 applications were received. The applications were shortlisted by a committee on the basis of a pre-determined criteria developed for the purpose. One Research Associates have been selected in the current year.

PLANNING AND MONITORING DIVISION

A Study of Global Citizenship Education Elements in the Various Curricular Practices of the Secondary Schools in India

Global Citizenship Education (GCED) is a form of civic learning that involves students’ active participation in projects that address global issues of a social, political, economic or environmental nature. The study covered various





Researchers conducting classroom observation during the visit to the schools for the data collection of Awakened Citizen Programme

curricular practices like ONGC-*Vasudev Kutumb*, Uttarakhand and Awakened Citizen Programme of Rama Krishna Mission. The research data have been collected from the secondary schools of Dehradun and Kendriya Vidyalayas of Kerala and Bihar where these practices have been implemented. The research study was conducted with the objectives to analyse the secondary school curricula related to elements of GCED, to analyse various curricular practices followed by the secondary schools related to GCED and to find out the relation between curricular practices related to GCED and socio-emotional competence of secondary school students. The analysis of the curricular practices show 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 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.

Compilation of an Annotated Bibliography of Development Programmes of NCERT during 2012–2018

The NCERT conducts a large number of development programmes every year approved by the Programme Advisory Committee (PAC). The project was conducted with the objectives to compile brief of development works conducted in NCERT during 2012–2018 and to disseminate the development works taken up by NCERT in the area of school education and teacher education during 2012–2018. Two hundred and eighty abstracts of development works done by the constituent units of NCERT have been collected so far from these constituent units.



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

A Study on Implementation of Vocational Education (from Classes IX to XII) in Schools

The objectives of the project were to study the status of implementation of vocational education in the higher secondary schools of the State, to determine the gaps in the implementation of the vocational education; to identify the level of satisfaction of students in terms of vocational skills acquired for career, to examine the satisfaction of employers about the development of vocational skills among student for employment, and to suggest strategies and recommendations for effective implementation of vocational education in schools. Data have been collected from 10 States. The main constraints cited by various respondents are: non-availability of books and/or books not available in Hindi and other regional languages, lack of equipment and laboratories, difficulty in finding teachers with suggested qualifications for some job roles, low salary of teachers, etc.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Implementing Interventions at Elementary School Stage: A Block Level Research

The research was conducted for implementing need based interventions in Hurda Block of Bhilwara District of Rajasthan and to see their effectiveness. The block was selected in the year 2018–19 on the basis of its poor performance in the NAS-2017. All the 167 schools including 83 primary, 54 upper primary, 6 secondary and 24 senior secondary schools involving five Sanskrit *Pathshalas* and five *Madarsas* of six Clusters of Hurda Block were covered under the study. From the three schools in the block running vocational courses, Government Higher Secondary Schools, Gagera (Hurda) has been identified by the PSSCIVE, Bhopal for interventions. For planning the interventions, the training needs of the teachers and teacher-educators have been assessed through the Need Assessment Tool developed on the basis of their subject specific needs and particularly to improve the low performing areas of district as reported in NAS-2017. The needs were collected through google form and also through direct interactions with teachers. The need assessment performa was based on learning outcomes, low performing areas in NAS and expectations in the form of academic resource support. The need assessment of more than 200 teachers have been collected and assessed. To track the learning levels and development of competencies amongst the students of the block, a baseline assessment survey was organised on March 29–30, 2019. The test items based on learning outcomes were administered to 19,568 students of Classes I–IX and XI of all 167 schools of the Block and majority 87.54 per cent students (17,131) participated in the test. The test items administered have been analysed and assessed based on level specific learning outcomes. On the basis of the assessed learning levels of students and teachers' assessment data, the need-based interventions (training and onsite support) particularly Art Integrated Learning and School Based Assessment for teachers and teacher-educators are being planned. Further, the follow-up of the implemented interventions



will be observed by continuous mentoring and case studies in the block. The study is an ongoing project of the Council.

A baseline assessment was conducted among the students from Classes I to XI of all the 167 schools of Hurda block from March 29–30 and April 01, 2019. For dissemination of activities planned under the study an app titled 'Interventions at Block Level' has been developed. The app contains all the information related to the study such as vision, mission and objectives, name of schools covered with details of student and teachers, interventions modules and the interventions implemented. The teachers of the block are being benefitted by the app by exploring the resource material.

A training programme for the Heads of all the 167 schools was organised at Swami Vivekananda Model School, Hurda on Learning outcomes, School based assessment and Art Integrated Learning in August 8–9, 2019. A capacity building programme for the master trainers on attaining Learning Outcome through 'Art Integrated Learning' was organised in the institute from August 19–23, 2019. A total of 44 Master Trainers, two from each 22 Panchayats have participated the training. The trained master trainers are entrusted to provide on-site support to the schools in their respective panchayats and also help in training of teachers and for continuous monitoring using field visit performa and case study performa which are used by the institute faculty for continuous monitoring and follow-up purpose. Formation of peer learning groups as mentor-teacher or master trainers on AIL to provide on-site support and continuous mentoring.

Factors Influencing Academic Performance and Retention of Elementary Level Students of Hurda Block (Bhilwara District)

The minor research project intended to examine the factors that influence academic performance of elementary school students of Hurda block and to establish strategies for improving enrolment and retention rates of elementary school students of Hurda block. The survey was conducted on 418 students, 166 teachers and eight headmistress/headmasters. Classes VII and VIII students of Government Girls High School, Taswaria reported that behaviour of teachers and head of their school influence their motivation and regularity in classroom more than the infrastructure. Many students of this area reported that they rarely received individual feedback after evaluation/examination and they do not use school toilet as some toilet areas are not suitable for girls. Many school teachers have accepted that friendly and caring behaviour of headmistresses/headmasters and support from other staffs is a strong factor of teacher's regularity and devotion towards school work. Teachers accepted that they are not able to prepare and use teaching-learning materials because of this engagement in other works in the school.

A Study of Learning Resources in Understanding the Concepts of Stereo chemistry and Reaction Mechanism in Organic Chemistry at Senior Secondary Level

The study was conducted with the objectives : to enrich the PGTs of Chemistry by learning resources on the concepts of stereo chemistry and reaction mechanism; to improve pedagogical skills of PGTs by capacity building in the use of Learning Resources on the concepts of stereo chemistry and reaction mechanism; to equip the PGTs with appropriate learning resources (3-D



Models, Kits, e-resources developed by the NCERT and other organisations) for the effective teaching-learning process on the concepts of stereo chemistry and reaction mechanism; to study the effectiveness of learning resources in understanding the concepts of stereo chemistry and reaction mechanism at senior secondary level. Interaction with students and administration of pre- and post-test in the sample schools revealed that there is a significant improvement in the performances of students after teaching reaction mechanism and stereo chemistry using innovative methods including models and multimedia. Capacity building of teachers in making 3D drawings using some software and apps enabled them to make multimedia for students in the area of stereo chemistry and reaction mechanism. Teachers reported that after interventions they were more comfortable in handling the concepts of stereo chemistry and reaction mechanism in classroom situation. Teachers and students also realised that interventions have been successful in creating active learning environments. Interventions also motivated students and increased their interests in learning of such important concepts in joyful manner.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Effectiveness of Virtual Laboratory on Achievement in Science at Secondary School Level

The objective of the research was to study the effectiveness of virtual laboratory on students' achievement in science at secondary level. The study was conducted in the Demonstration Multipurpose School, Bhopal for the students of Class IX. The intervention was done using a package on virtual laboratory. The main aim of teaching science at secondary school level is to enhance the understanding of students about the concept and processes of science which include four components viz., scientific understanding, scientific investigation, scientific communication and habits of mind. In this connection, the present study reveals that the teaching-learning of science through virtual lab is effective and efficient in enhancing students' achievement and to understand the science concept with more clarity.

A Study to Assess the Implementation of Social Science Pedagogical Training Programme in Classroom Process of Maharashtra

The research was conducted with the objectives to study the extent of implementation of training content and materials, pedagogical process imparted in the training programme, benefits in teaching-learning of social sciences and the problems in implementing pedagogical process imparted in the training programme. The study was conducted in nine schools by using the research tools viz., a schedule for school infrastructure, classroom observation schedule, interview schedule for teachers and schedule for focus group discussion with the students. Constructivist pedagogy was somewhat tried out by the teachers in teaching-learning process. Focus group discussion with students reveals that implementation of constructivist pedagogy was not satisfactory. It was found that most of the schools do not have basic infrastructure like smart classroom, laboratory, libraries, etc. DIET faculty who had attended training programme conducted by RIE, Bhopal were found to have further conducted many training programmes. Taking forward and implementing what they



have learnt in the training programmes, some DIET faculties have developed e-Content on social sciences and got awards from the State government for their work. The study also found that majority of the school integrated ICT in teaching-learning process, but the frequency and usage is found unsatisfactory. The overall analysis of classroom observation also revealed that constructivist pedagogy was adopted in teaching-learning process by most of the schools.

A Case Study of Porta Cabin School of Bastar Region of Chhattisgarh State

Chhattisgarh government started portable schools in the year 2011, known as Porta Cabin Schools in Bastar for the children who were displaced from schools due to civil strife and armed conflict. The research study was undertaken with the objectives to study the nature of enrolment and retention levels, to study the status of availability, accessibility and utility of physical and cognitive and human resources, to analyse the special measures taken by the schools to address psycho-social disturbances of the displaced children, to identify pedagogic and educational issues encountered by the students, etc. The data have been collected through interactions with all the stakeholders, classroom observation and focus group discussions with students. The study reveals that: Enrolments are against sanctioned strength; hence, enrolments in every Porta Cabin are as per sanctioned strength; Retention rate is 97 per cent. The phenomenon of drop-out from the school is non-existent; Physical and cognitive infrastructural facilities are in place; No special mechanism to address psycho-social issues encountered by students is in place; Pedagogical culture is dominated by chalk and talk method; Teachers and others exhibit paternalistic attitude and fear consciousness looms large in the school.

A Study on Providing Community Experience to RIE, Bhopal Students

Community programme provides the real life experience to the student-teachers of the institution. The main objective of the programme is to know the rural India and its people in every respect. This envisages to provide not only the community experiences but also the research experiences to the prospective teachers. The research was undertaken with the objectives to study the social, economical, cultural and educational pattern/status of the village, to provide input to students, teachers, parents/villagers and VEC members for the over-all development of the educational status of the village, to provide community experience to the students of the RIE, to provide counseling service to the students/youths, to launch awareness campaign on literacy, gender equity, RTE, child rights, AIDS, superstition, dogmas, etc. The villages viz., Ichhawar, Kakar Kheda, Brijeshnagar, Bisan Kheda, Bordi Kalan, Dhamanda, Dharampure, Jathkhedi, Kaveriya, etc., were selected for the study. The student-teachers of the institute stayed in the village for five to seven days and carried out different activities. They engaged in the activities like educational survey of the village, case studies of the families, awareness programmes on literacy, sanitation, AIDS through organising cultural programmes, ‘*Shram Daan*’ for promoting ‘*Swachh Bharat campaign*’, etc. The research shows that the socio-economic status of the villagers influences their education. The economy of the family is not dependent on education. The villagers have changed this mind-set due to the developmental scheme undertaken by the Government.



Implementing Interventions at School Stage: A Block Level Research Project

The on-going institutional project that began from the academic session 2017–18, aims at implementing various training based interventions in *Ichhawar*, the adopted block of RIE, Bhopal. In order to improve the learning outcomes of school students. The objectives of the research are: to assess the learning levels of students at the school stage in an identified revenue block (assessment); 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 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 develop/modify the need-based interventions for teachers and teacher-educators. This 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, etc. During the academic session 2019–20, many activities, *inter alia*, orientation of the primary school teachers on the use of science, mathematics and early arithmetic kits; orientation of the upper primary schools teachers on the use of science and mathematics kits; orientation of primary and upper primary schools teachers on the use of ICT in teaching-learning process, were conducted. Besides, on-site academic support was provided by the academic staff of RIE, DMS and PSSCIVE, Bhopal in terms of continuous interaction with students, teachers, school heads and community members. At the end of academic session 2019–20, Achievement Survey for Classes I to XI students using NAS tests.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESHWAR

Implementation of NCERT Interventions at Elementary School Stage: A Block Level Research Project

For improving quality learning at the elementary level, NCERT has selected five blocks from different regions of India. In the State of Odisha, RIE, Bhubaneswar has adopted all the elementary schools of Chilika Block. Questionnaires designed by NCERT were used for collecting the background data from 16,192 students, 549 teachers and 110 head teachers of Chilika Block. For qualitative study, faculties of institution were divided into 11 groups and had visited all the schools. Classroom observation was conducted and on-site support was provided. The intervention like activity-based teaching, orienting teachers how to use different kits, using art integrated strategy, helping in conducting formative assessment, helping in laboratory, how to teach in multi-grade classroom through integrated approach and experiential, etc., were discussed on-the-spot for improving learning of the learner.

The study reveals that the performances of girls students are good in different subjects in the Classes I to VIII. It is also found that though most of the schools lack infrastructural facilities, the teachers were very much enthusiastic towards their profession. Many schools doesn't have sufficient numbers of the classroom in which students of three classes (Class I, Class II and Class III) sit in a single classroom in separate circles respectively. As a result, disturbance becomes common while taking classes. The trained



teachers follow Art Integrated Learning method as an ice-barker to maximise the impact in learning. Charts and wall paintings on the classroom are available in maximum classrooms and TLMs are used by teachers during taking the classes. Some teachers are successful in bringing back the dropout students to their schools by visiting doorstep of the students. To know the causes of dropout a MINA MANCHA was formed among the students, who ultimately visit door-to-door of dropout students and try to bring them back to schools. CRCCs, ABEO and BEO visit the school to observe the classes in a monthly or weekly basis to bring improvement of the quality learning.

Reorganisation and Merger of Schools at Elementary Level in the context of the RTE Act, 2009 in Jharkhand

The objective of the research was to study the access, enrolment, infrastructure, teaching-learning materials, position of teachers, pupil-teacher ratio and curricular activities in merged and non-merged schools. The data were collected through a questionnaire for head teachers, conducting focus group discussion with students and interviews with parents and teachers. The study indicated that school reorganisation and merging at elementary level was initiated by the State government for providing better educational facilities, Public Teacher Ratio and for improving performances of the students. The study reveals that the infrastructure facilities, classroom transaction and students achievement has not been improved even after school reorganisation and it's merging. Some students and parents expressed displeasure as the new schools were placed away from their habitation.

Evaluation of In-service Teacher Training on Classroom Practice in Mathematics at Senior Secondary Stage of Andaman and Nicobar Islands

The objectives of the research were to study the perception of the senior secondary mathematics teachers about the usefulness of in-service training, observe the change in classroom practice of senior secondary teachers and to find out the constraints, if any, in using the training inputs in classroom transactions.

The study adopted descriptive survey method and the major findings of the study were: Curricular contents in Mathematics prescribed for Classes XI and XII were found to be quite appropriate, grade specific and properly sequenced; In topics Probability, 3-Dimensional Geometry, Relation and Function, Integral, Calculus, Differential Calculus, Integral Calculus, Vector, Application of Integral, Vector Algebra, Application of Derivatives, Trigonometry, Sequence and Series, Matrices, Determinant, Differentiation, Permutation and Combination, Binomial theorem, Straight Line, Sets, Linear Programming Problems, Conic Section, Integration, teachers faced difficulty in transaction and students had problems in understanding the concepts; The resources materials, such as mathematics lab and mathematics kits were not available in every school; Among the study resource materials available in the schools, Practice books, textbooks, NCERT Exemplar were most frequently used in the schools; Teaching-learning materials are used by more than one-third responding teachers; The preparation of lesson plans/notes in mathematics is more ritualistic than having any serious and practical pedagogical concern; Method appropriate to content was mainly done by relating it to the previous lesson/knowledge and least by doing activities.



The five major issues of teaching mathematics to students at senior secondary level are: (i) getting less time for teaching and practice for students, (ii) poor basic concept and foundation, (iii) unable to use ICT for teaching and learning process, (iv) some schools did not have Math labs due to which there is difficulty in learning concept, and (v) The syllabus completion target is very rigid and syllabus is vast. The attention to individual learning needs is not found to be so frequently used in many classrooms. In most of the mathematics classes, oral and written assessment strategies were followed. The scope for peer and self-assessment is rarely found in mathematics classroom.

Art Integrated Learning at Elementary Level Problems and Issues in Implementation: An Exploratory Study

The research was conducted with the objective to study the perception of teachers and students on Art Integrated Learning. The data were collected from 53 students and 21 teachers from Dasarathi cluster, Chilika and Khordha. The study showed that teachers and students have favourable perception towards Art Integrated Learning as it makes learning joyful, participatory and helps students in understanding the concepts. The study has suggested for orientation of teachers and Head Teachers on Art Integrated Learning specially focusing on teaching subjects like mathematics and science at upper primary level. Further, it was recommended that Art Integrated Learning may be included in the pre-service teacher education programmes at elementary level.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

Evaluation of Effective implementation of D.El.Ed. Programme in Andhra Pradesh

The study was carried out to evaluate the D.El.Ed. Programme. Different courses are specifically mentioned for I and II years separately in NCTE curriculum. But in Andhra Pradesh D.El.Ed. few of them have interchanged. ICT is integrated with pedagogy across the curriculum. Teacher development is integrated with School Culture, Leadership and Change. Pedagogy of Mother Tongue/First Language at Primary Level is considered as a separate paper. Andhra Pradesh includes Pedagogy of Elementary Level Subject— Optional Telugu/English/Maths/Science/Social Studies (Classes VI–VIII) but not as a compulsory paper. So it is not compulsory for all the students to study Telugu/English/Mathematics/Science/Social Studies for Classes VI–VIII. The paper ‘Cognition, Learning and the Socio-Cultural Context’ is not given as a separate paper in Andhra Pradesh but some contents of this paper are included in ‘Childhood and the Development of Children’ that has led to overburdening the paper for a single semester.

The National Council for Teacher Education (NCTE)-2014 guidelines for D.El.Ed. curriculum has been adopted to a larger extent with slight changes in some course papers. Though the need to provide equal opportunity time for scholastic and co-scholastic aspects are shown in the academic calendar, it needs to be reviewed in realistic sense. The pedagogy papers need to be reorganised and at primary level, needs a thorough revision. Though the NCTE suggested longer duration of internship, it has been bifurcated as spell 1 and spell 2 having field study and project study; practice of teaching and internship. Teaching practice and Internship are two different aspects.



Their purpose and mode of functioning are also different. Hence, this needs to be reviewed holistically. Usage of ICT in pedagogies and its actual usage in classroom transactions need to be reviewed with many alternative strategies including usage of smart phones and usage of educationally suitable software to the content as well as context.

Implementing interventions at Elementary School Stage: A Block Level Research Project

The research was conducted with the objectives to conduct a status study of the block and sub-block level functionaries in order to understand their effective functioning, 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 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/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 employed community-based collaborative action research method based on the principle of subsidiary, by understanding the system and later implementing interventions through the involvement of state, district, and block level school education functionaries as well as the school teachers and other functionaries including the community. As per the plan, apart from conducting the baseline assessment for the remaining more than 8,000 students including Classes IX and X students and English medium students, four capacity building programmes were conducted. This included programmes on Art integrated learning school-based assessment, use of mathematics kits and Community mobilisation programme. After the conduct of capacity building programmes, the masters trainers is engaged in training other teachers in their clusters. A report on the baseline assessment done for Kannada medium students has been prepared. The major findings of the study are:

1. The overall achievement of Class III students is relatively higher than other Classes.
2. Students appear to do well in Kannada, followed by Science, Maths and the lowest in Social Science. Their performance in their mother tongue is stronger.
3. On the whole, girls are doing better than the boys in all Classes.
4. Teaching-learning at upper primary level is a problematic issue in Hunsur schools.
5. On EVS, in classes III, IV and V, girls have performed better than boys in all classes as well as on the whole. Urban students have performed better



than the rural students, general category students have performed better followed by SC, OBC and ST category students on the whole.

6. On science achievement, students belonging to OBCs have performed better than General category, SC and ST categories, on the whole.
7. On social science achievement, rural students have performed better than urban students, OBCs have performed better than SC, ST and General categories.
8. Urban students are performing better than the rural students on language on the whole and also in many elementary classes, while rural students are better than the urban students in mathematics learning.

Research-based Interventions in Enhancing the Effectiveness of Implementation of the Right of Children to Free and Compulsory Education, RTE Act, 2009 in Andhra Pradesh

The study was conducted with the objectives to find out the status of implementation of various provisions of RTE Act, 2009 in the Andhra Pradesh state, to find out the concerns and challenges of the Andhra Pradesh state for effective implementation of RTE Act, 2009 and to assess the awareness level of stakeholders to implement RTE Act, 2009. The data on implementation of RTE Act have been collected from the districts Krishna, Nellore and Kurnool. The study reveals that the enrolment level has increased after the Act was implemented. There is increase in attendance and continuity of children in the classes but in all the three regions mainly due to migration, agriculture work and parental health problems. There is improvement in school facilities such as drinking water, toilets and ramp but the maintenance remains to be very poor still faces dropout problem. Teachers are involved in the identification of out-of-school children. It is also noticed that timely distribution of textbooks, school bags, uniforms are done in many schools but it is delayed in some schools. The learning level of children ranged from satisfactory to good. Mid-day meal scheme has helped in increasing attendance of students.

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM

Factors Responsible for Low Performance of Students of Class X in the State of Arunachal Pradesh

A study on the factors responsible for low performance of Class X students in the State of Arunachal Pradesh was carried out with an attempt to find out the relationships of teaching practices, socio-economic condition of students' family, parent's educational qualifications, students' factors like mental ability, study habit and adjustment capability, peer influence and school management with students' academic performance. The research tools used viz., Standard Progressive Matrices, Study Habit Inventory, Bell's Adjustment Inventory, Questionnaire, personal interview and FGDs were used. The respondents included were school principals, teachers, parents and students. The study showed that socio-economic condition of the families did not influence academic performance of the students. Some of the teachers revealed that lack of science laboratory is one of the major problem faced in teaching of science. The study revealed that the factors responsible for low performance of students in Class X



in the State were poor teaching methods, lack of subject competency, students' study habits, peer learning and physical and mental adjustment of students.

Implementing Interventions at the School Stage: A Block Level Research Project (Bhoirymbong Block, Meghalaya)

One of the historical moments of the NCERT's Foundation Day, 2018 was the handing over of the Bhoirymbong Block, Ri-Bhoi District, Meghalaya by Shri L. Rymbui, the Minister of Education; Government of Meghalaya to the North-East Regional Institute of Education, Shillong for implementing interventions. Ri-Bhoi is one of the districts of Meghalaya, with an area of 2,378 sq km. There are four Community and Rural Development Blocks namely; Umsning, Umling, Jirang and Bhoirymbong. The district headquarter is located at Nongpoh. This study, however, is confined to Bhoirymbong Block of Ri-Bhoi District, which is also the aspirational district of the State of Meghalaya. The Block, comprises of 10 Clusters namely; Umroi, Umeit, Bhoirymbong, Nongtraw, Mawbri, Liarbang, Kyrdem, Klew, Mawlasnai and Tyrso. The Block has 198 schools, 999 teachers and 16223 students studying from Lower Primary to Higher Secondary level.

NERIE, has been conducting various activities in Bhoirymbong Block under Ri-Bhoi District. The Institute conducted Baseline Achievement Survey on April 30, 2019 and on May 2, 2019. School Questionnaire, Teacher's Questionnaire and Student's Questionnaire also used to collect the background data of the schools in the block. An orientation programme for Block Resource Persons on filling up of the OMR sheets for school, teachers and pupils was organised on July 17 to 18, 2019. A science exhibition was organised for the students of this block on October 1, 2019 at Umroi Presbyterian School, 300 students from Classes V–XII attended the Exhibition. In addition, a Student *Mela* on 'Enjoying, learning and growing together' was organised on March 13, 2020 at RBP Synod School, 220 students including 17 CWSN children attended the *mela*. Ten Faculty Members have been assigned 10 CRCs for on-site support. A general school related observation data collected reveals that: many schools are equipped with proper and ventilated classrooms, proper seating arrangements are made for the students and toilet facilities. However, teaching-learning materials, laboratories and libraries were not seen in most of the schools. Many teachers in the lower primary classes were Classes XII passed but the teachers who teach at the Upper Primary level are mostly graduates. There are some good practices in the block which include regular parent-teacher meeting, good involvement of the Church and the community's pro-active role in the educational activities.

A Study of Factors Contributing to Teacher and Student Absenteeism at Elementary Level in Hill Areas of Manipur

The main aim of the present study is to find out the factors contributing to teachers and students absenteeism at the elementary school level in Hill areas of Manipur. As per the data collected, it has been found out that in Churachandpur district 93.10 per cent of teachers and in the schools of Tengnoupal district 84.62 per cent of teachers are regularly absent from the school. From both the districts, the main reasons towards teacher's absenteeism are poor working condition, lack of job satisfaction, relaxed school policies on absenteeism, seeking additional income, transportation problems, fellow co-operative attitude, bad weather and regular *bandh*. The findings indicates



that from both the districts, poor health condition, financial difficulties, child work/house errands, death of parents, insecurity in classroom, language problem, regular *bandh*, lack of transportation as the schools are located in the interior villages, poor health conditions, peer groupings, unsupportive family environment, poor health, peer grouping, unsupportive family environment, failure in examinations, death of parents, financial difficulties as well as communication problems among others, are the main reasons for absenteeism among the students. The findings also show that a total of 65.52 per cent students are absent for 2–3 weeks from the school in a month.

Evaluation of In-service Training Programme Conducted in the State of Meghalaya

The main objective of the study is to evaluate the in-service training programmes conducted by DERT, DIETs, SSA and RMSA of Meghalaya. All the DIETs and DERT had conducted various training programmes during the year 2013 to 2018 with a total number of 119 in-service training programmes. The training programmes were conducted in all the districts of Meghalaya. The findings revealed that about 95 per cent did not conduct any need-based assessment before proposing the training programme. Development of training module or package is not a focused area. In other words, training module or package was not developed before the conduct of the training programme. There is no distribution of training module or package. Most of which were downloaded from the NCERT website. Teachers had gained much knowledge on constructivist approach during the training programme, but some of the teachers could not implement them in classroom teaching. As reported, teachers still lack the understanding of this approach. Teacher-educators felt that there should be training on proper understanding about constructivist approach to apply in their teaching. They felt that new teaching methods learnt during the training programme are not applied practically in the classroom. Teachers need to understand the significance of child or learner-centric approach more thoroughly. More training programmes related to enrichment of the content as well as the pedagogical aspect in all the subject areas need to be conducted. They express that during the training, they need to get more experience on hands-on activities and emphasis should also be on training other important and emerging areas. The data reveals that in some of the DIET's evaluation of the training was conducted with the help of feedback format and questionnaires. There was lack of follow up after conducting every training programme. No follow up procedures were conducted by the concerned authorities. The training programmes as revealed by the teachers were not subject/area centred. Teachers were invited to attend the training regardless of their subject background or area of specialisation.

SSA and RMSA had conducted a number of training programmes on Mathematics for the lower and upper primary level in various parts of the State. An intensive programme to improve the quality of learning in Mathematics was initiated in Classes I and II in 50 schools spread all over the districts of Meghalaya. SSA Meghalaya in collaboration with *Jodo Gyan* had conducted follow up meetings at the block/cluster level. It was also mentioned that regular school visits were made by the BRCs/CRCs to check the effectiveness of sustainable development in Mathematics. Six RPs were identified for regular



school visits. In spite of less number of teaching staff present in the SSA schools, long deputation hampers the students classes in completion of their syllabus during the training programme. The issues faced by SSA/ RMSA training programmes was fund constraints and improper training centres.

Some of the issues and challenges are lack of resource persons, delay in receiving the funds at times, lack of computers/projectors, science/maths labs, educational kits, transportation and accomodation problems, as there were lack of hostel facilities, delay in receiving the deputation letters on time for the teachers, time constraints, infrastructure constraints such as lack of training hall/room for conducting training programme, drinking water facilities, electricity, power point facilities, rooms were very congested etc. These are some of the hurdles encountered.

A Study of the Problems of Students in Sikkim and Meghalaya

The research study was conducted with the objectives to identify the diverse and specific problems faced by the adolescents in the state of Sikkim and Meghalaya, to study the causes of these problems in adolescents. The tools used for the study were interview schedule for the head of schools, parents, and students and questionnaire for teachers and focus group discussions. The sample for the study includes students from the age group 10 to 19 years, Headmaster, teachers and parents from 20 schools each from the state of Sikkim and Meghalaya. The findings show that majority of the rural and urban male and female did not agree that their friends can force them in doing things which they do not like. Teachers' opined that student's problems include truancy, indiscipline bullying, destruction of school's infrastructure, disobedience, smoking and eating of tobacco/betel etc. They said that these issues were mainly due family problems, lack of parental guidance, lack of motivation by parents, academic problems, broken families, disturbed families as well as alcoholic parents and social media.

A Study of Emotional well-being of Elementary School Students of Bhoirymbong Block, Meghalaya

The research study was conducted to identify the feelings of students in different areas such as worry, happy, trust, fun, school, teacher, tests, home and friends. From the findings, it is revealed that around 74.9 per cent of students are having healthy emotions where 18.1 per cent are unhealthy and 7 per cent are uncertain. Further, the results were revealed under various domains and areas such as by gender, by grade level under happiness, fun at school and with friends, trust, loneliness, about school and test, level of happiness with teacher and friends, at school and at home. Interestingly, highest level of happiness with teachers was shown at the lowest level as 29.2 per cent while, 49.2 per cent were with family members.

A Study on the Effect of PTR on the Achievement of Students of Bhoirymbong Block of Meghalaya at Secondary Level

The average number of students per teacher in the educational years of 2016–2017, 2017–2018 and 2018–2019 was collected along with the examination results of the students and the qualification of the teachers from 10 secondary schools of Bhoirymbong block. The sample covered CRCs, two schools from each CRC. The respondents of the study include, principals,



headmasters, teachers, CRC officials. The research findings revealed that high pupil-student ratio at secondary level affected the academic performance of the students. Even though, statistically there was no significant negative correlation between the pupil-teacher ratio and the achievement of the student. The study also revealed that gender is totally independent on the pupil-teacher ratio and the academic performance.





4. Development Activities

Developmental programmes that enhance teaching-learning process in all areas of school and teacher education are undertaken by various constituents of the NCERT. These include audio-visual materials, textbooks, handbooks, training packages, manuals, supplementary readers, kits, etc. In the year under report, the Council has been involved in the development of handbooks on— *Art Integrated Learning*, exemplars based on learning outcomes, course material for the certificate course on curriculum design, online course in arts education and local heritage mapping, online certificate course in teaching of Urdu at elementary stage, online course on skill enhancement for teachers teaching Hindi, course on value education and various Massive Open Online Courses (MOOCs) for school education. Textbooks in music, visual arts, computer science and informatics practices and vocational skills, guidelines for nurturance of gifted and talented children, Hindi version of the book, *Including Children with Autism in Primary Schools Teachers*, handbook on multilingual education, identification tool for disability conditions recognised in RPWD Act 2016, supplementary reading materials in Hindi, English, Urdu and Sanskrit, anthology of *Bal Kathayen* in hindi written in Indian languages, textual material on inclusive education in Urdu, conceptual glossary of terms used in teaching-learning process, teaching-learning material in Urdu on *Assessment as Learning*, workbook in English, *Tamanna: An Aptitude test*, online reading material for teacher counsellors on dealing with behavioural issues among school adolescents, activities in chemistry, audio/video resources on experiments or activities in Biology and Chemistry, tactile books in Mathematics, resource material on management or conservations of water, transformatory material for awareness generation and attitudinal change with respect to gender, mathematics practical manual and e-resources for the school and teacher education curriculum have also been developed during 2019–20.

DEPARTMENT OF CURRICULUM STUDIES

Course Material for the Certificate Course in Curriculum Design and Implementation of Course

The certificate course in curriculum design and development aims at strengthening capacity of teacher-educators, teachers and curriculum developers as well as researchers in planning, designing, and implementing the curriculum. The course material comprises four modules, viz., Introducing Curriculum, Curriculum Design, Disciplinary Foundations and Curriculum, and Curriculum Approach. Module 1 aims at developing the conceptual

understanding of the term curriculum and related terminologies. After giving a brief introduction of the emergence of the discipline, it makes an attempt to map out different ways of defining or understanding the term. This is followed by a discussion on curriculum design, curriculum development, curriculum framework, syllabus, etc. The module concludes by offering a description of components of curriculum namely— curriculum objectives, curriculum content, methods of teaching, evaluation, etc. In Module 2, the idea of curriculum design has been introduced and discusses in detail the sources of ideas for curriculum design—knowledge, society and learner. A brief account of researches and literature on models of curriculum design is also given. A discussion is initiated on considerations for design dimension in this module and at the end, various types of curriculum designs have been discussed. In Module 3 (Disciplinary Foundations and Curriculum): this module aims at developing an understanding of the disciplinary foundations— philosophical, psychological, and sociological bases of curriculum design. The module also includes a discussion on relationship between theories of knowledge, learning and curriculum. In the Module 4 (Curriculum Approaches): the participants are introduced to various approaches for conceptualising and designing a curriculum. These include behavioural, academic, humanistic, and re-constructionist approaches. The various curriculum approaches professed by Indian thinkers have been discussed. The Module also includes a discussion on some alternative approaches to curriculum. The course is planned to be conducted in a blended mode in a phased manner. The duration of the course will be of three months. The target group comprises faculties from SCERTs, DIETs, school teachers, potential teachers, researchers, school heads, curriculum developers and other organisations dealing with educational innovations.

DEPARTMENT OF ELEMENTARY EDUCATION

Early Writing: A Beginning

This book is the English version of the book titled as '*Likhne ki Shuruat: Ek Samvaad*' published by the NCERT. It is an edited book which focuses on exploring the varied perspectives related to writing among early grade children. It comprises chapters contributed by academicians as well as teachers who are engaging with young children. This book will help the teachers in understanding the writing from the perspective of children and what can be the possible pedagogies which they can use in their classes to help them in learning writing in a meaningful and interesting manner.

On the Threshold of Reading

This book is the English version of the book published by the NCERT titled as '*Padhne ki Dehleez Par*'. This compilation offers perspectives and accounts of experiences of teaching children to read and organising a comfortable reading environment for them. The content included in this book will provide reading material to teacher-educators for generating discussion on notions and practices prevalent about reading and writing. For practising primary school teachers, it provides a perspective that will compel them to view their teaching space and time critically. It will offer them a few ideas about the use and selection of interesting children's literature.



Padhna hai Samjhna

This book is the Hindi version of the earlier book published by the NCERT titled '*Reading for Meaning*'. It focuses on developing an elaborate and in-depth understanding related to varied aspects and philosophies related to reading. The major aim of this book is to promote the view that mere cramming of alphabets, words and sentences is not reading. It is much beyond that and requires meaningful engagement with the content. This book will help the teachers as well as parents in understanding the importance of reading. It also includes activities and details about pedagogies which can be used to promote the process of reading, which reflects their day-to-day life experiences in an imaginative manner.

Teaching Reading: A Beginning

This book is the English version of the earlier book published by NCERT titled as '*Padhna Sikhne ki Shuruat*'. It comprises of articles written by teacher-educators and teachers who are working with children of young age. This book not only tries to explore the theoretical aspects related to reading rather it focuses more on its praxis part. It provides varied viewpoints related to reading in classroom and in different context and how these can be used by the teachers as well as other stakeholders to make reading a meaningful activity for learners instead of a mere drilling.

Video Programmes on Language and Literacy at Nagpur

Three video programmes have been developed in collaboration with the Maharashtra State Government. The objective of the programme is to address the issues related to foundational literacy among the students studying in tribal areas. The contents in the videos focused on engaging the students with *Chikaldhara* (Amravati, Maharashtra) and to facilitate them in learning reading and writing skills.

Adaptation of Barkha Series in Regional and Tribal Languages of Maharashtra

In collaboration with Maharashtra State Government, the *Barkha* graded reading series was adapted into three regional and tribal languages of the state viz., *Marathi*, *Korku* and *Gondi*. This reading series helps the learners in engaging meaningfully with the text and improves their reading abilities. Adaptation of this reading series in different languages will help in addressing multilingualism in classroom and in creation of an inclusive teaching and learning environment.

Adaptation of Barkha Series in Regional and Tribal Languages of Jharkhand

In collaboration with Jharkhand State Government, the *Barkha* graded reading series was adapted into seven regional and tribal languages of the state, viz., *Mundari*, *Ho*, *Bangla*, *Khadia*, *Khortha*, *Kuruk* and *Santhali*. This reading series help the learners in engaging meaningfully with the text and improves their reading abilities. Adaptation of this reading series in different languages will help in addressing multilingualism in classroom and in creation of an inclusive teaching and learning environment.



Video Programmes for Teachers Working in Special Training Centres (STCs) for Out of School Children (OoSC), Under RTE Act, 2009

The department focuses on the uplift of the education for the children who are deprived of the formal education because of varied factors, i.e., lack of knowledge of parents, poverty, lack of awareness, dropouts, etc. For this, the teachers imparting knowledge to these children must be aware of the multi-level teaching for bringing out the best results. The need to train the teachers working with Special Training Centres was felt and a video programme was developed. This video programme is developed for the teachers working in special training centres under RTE Act, 2009 and mainly focuses on the awareness of the provisions for these children under RTE Act, 2009. It depicts the provisions given under the RTE Act, 2009 for OoSC and also highlights how teachers should handle different situations in the classroom while handling children from diverse background.

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

The programme was aimed at developing e-Content in EVS for students at the primary level. These 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 and be active learners. So far 12 videos have been uploaded on official website of NCERT and YouTube, and 34 H5P have been uploaded on NROER.

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

The programme was intended to help the primary teachers and teacher-educators understand the objectives and pedagogy of EVS teaching-learning. It was launched on 'Swayam' portal on 14 October 2019, an initiative of the Government of India under the Digital India Programme and other portals of MHRD/NCERT such as *e-Pathshala*, ITPD and NROER. The course Pedagogy of Environmental Studies has duration of 40 hours in total. The course material includes 31 modules on 14 themes. These were supplemented with videos. For the year 2019–20, the course was being pilot-tested which ended in March, 2020. So far, 8091 candidates have enrolled themselves to pursue the course.

Interactive e-Learning Material for Teaching-learning of Primary Mathematics as per the Pedagogical Processes given in the Learning Outcome Document

In order to help children in understanding the basic mathematical concepts and also to practice through interactive learning experiences, e-Learning applications are being developed for mathematics at primary level. Scripts of 15 interactive e-Learning materials (both in English and Hindi) are developed and outsourced for production. These applications can be run on any platform (windows, android, IOS). Further chapter-wise scripts for e-Learning content have also been developed for mapping with the QR codes in each chapter of mathematics book *Math Magic* for Classes I to V, both for English and Hindi versions. The e-Content is interactive and supplements all the chapters of the textbook.



Items for Assessment of Achievement in Learning Outcomes at Elementary Stage through Interactive User Interface and Question Bank for Elementary Classes in all Subjects

Interactive user interface has been designed to assess the achievement in learning outcomes at elementary level. An online assessment portal with 800 objective type questions in Mathematics and 400 questions in Hindi language pertaining to all learning outcomes of Classes III, IV and V has been developed along with its error analysis. This interactive portal would comprise similar questions in all subjects so that different assessments can be generated according to a set of parameters like LOs, difficulty level, time, competency, etc. The questions also highlight the misconceptions associated with each incorrect option.

Posters for Children

Posters on different themes have been developed under the Integrated School Language Programme (ISLP). Different genres have also been included in these posters, for instance, poetry and stories. Some image-based posters have also been developed. These are available in both Hindi and English. It will help in creating print-rich environment in different contexts like, classrooms, libraries, and homes. These can be used by teachers, teacher-educators, parents, and other stakeholders to facilitate learning young children. These can be used to engage students of all grades and of different subjects as they provide opportunities for group reading, observations and discussions. These posters will also be beneficial in creating an integrated classroom.

Barkha Series in English

Barkha graded reading series has been adapted in English language. It was developed in Hindi for early graders. It includes 40 books spread out in five themes. This reading series comprises four levels and the gradations across levels has been achieved by variation in syntax, number of words and complexity of sub-plots. It has been adapted in English language to facilitate the English language learning among the young learners. There are two central characters in every theme and the stories have been presented through their perspective. This will help the readers having meaningful engagement with the content and developing reading skills.

Exemplar Bridge Course for Out of School Children

An exemplar bridge course has been developed from Preschool to Class VIII. The course has been divided into four levels — Level I – Readiness, Level II – aligning to learning outcomes of Classes I and II, Level III – aligning to learning outcomes of Classes III to V and Level IV – aligning to learning outcomes of Classes VI to VIII. For every level, in each subject there are five components— diagnostic test, basic stage, intermediate stage, grade appropriate and assessment. There are three exit points at the end of Level III, IV and V at Classes II, V, and VIII. The bridge course also comes with a teachers’ handbook, which helps the teacher in transaction and assessment of the competencies to bridge the learning gap. Thirteen books and a teachers’ handbook is under print.



DEPARTMENT OF EDUCATION IN LANGUAGES

Supplementary Reading Materials in Hindi, English, Urdu and Sanskrit

The objective of the programme is to develop supplementary materials in four languages viz., Hindi, English, Urdu and Sanskrit. The experts from universities, NBT, New Delhi and Association of Writers, Delhi were invited. The material in the form of stories and literary pieces based on Gandhian Philosophy and the likes were selected. The selected material is to be translated in other languages.

Anthology of Bal Kathayen in Hindi Written in Indian Languages

The objective of the programme is to promote extensive reading among the students and promote multilingual education. It is a collection of stories in Hindi from 22 Indian languages. This will help in promoting extensive reading among learners. The anthology can be useful in promoting multilingual learning approaches among the students and also inculcate reading habits among students.

Difficulties Encountered in the Reading of Medieval Poetry

A number of problems to fill the gap between Hindi and other Language and Literature such as Bruj, Awadhi, Mathili etc., in classroom have been identified and the material has been developed to facilitate the teaching-learning process.

e-Content in Languages Hindi, English, Urdu and Sanskrit

More than 100 e-Contents in audio-video format in four languages—Hindi, English, Urdu and Sanskrit have been developed. The e-Content familiarises learners with usage, grammar, reading comprehension, vocabulary and writing process, etc. This gives freedom to the learners at all stages of school education to learn at their pace. Effort is being made to develop the material keeping in view the parameters such as age, interest, inclusion, etc.

Online Certificate Course in Teaching of Urdu at Elementary Stage

Thirty-five modules have been developed for the online course in teaching of Urdu. Each module consists of texts, videos, self-assessment test and web links.

Textual Material on Inclusive Education in Urdu for D.El.Ed. and B.Ed. Students

The textual material on inclusive education has been developed in Urdu language for D.El.Ed. and B.Ed. students. The developed material would be helpful for children with special needs. The main emphasis has been given to equip the teachers as well as students in understanding theoretical and practical knowledge of inclusive education.

Conceptual Glossary of terms used in Teaching-learning Process

School teachers use a large number of terms during the teaching-learning process in Urdu. During the orientation programmes organised, it was observed that school teachers were not fully aware of the terms. Keeping this in view, the glossary has been developed with a view to overcome the difficulties of teachers in clarifying and explaining the terms. Approximately seven hundred terms have been identified from different sources such as teachers' manual, textbooks, supplementary readers, teachers, teacher-educators and language experts.



Teaching-learning Material in Urdu on ‘Assessment as Learning’ for the Students of B.Ed.

In order to enrich the assessment practices, teaching learning material in Urdu for the two years B.Ed. course, has been developed in two volumes. It will be useful for the assessment of B.Ed. students.

Online Skill Enhancement for Teachers Teaching Hindi ‘A’ Course at Secondary Level

Eleven major modules comprised in the form of audios-videos and weblinks have been developed and have been sent to CIET for production.

Handbook in English on Exemplars based on Learning Outcomes

The handbook in English on exemplars based on Learning Outcomes for upper primary stage has been developed. The pedagogic processes to achieve the learning outcomes have been suggested. The handbook elaborates the significance of assessment, how it can be linked with learning and how the language skills can be enhanced in an integrated manner. It is expected that the handbook may enable the teachers to develop context-based relevant activities for learners.

Workbook in English for Class X

The Words and Expressions 2, workbook in English for Class X has been developed. This workbook is a sequential continuation of *First Flight* (textbook) and *Footprints without Feet* (Supplementary Reader) for Class X. It would enable the students to improve their skills in the English language.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Guidelines for Nurturance of Gifted and Talented Children

The guidelines aimed at guiding nurturance programmes for gifted and talented children, promoting research in different thrust areas related to education and nurturance of talented children, formulating and identifying tools and developing programmes to identify and nurture the high abilities of talented children, sensitising and training stakeholders like teachers, teacher-educators, educationists, mentors, professionals, researchers, parents, administrators, students, community, etc., for identifying and enhancing talents. The draft guidelines covering the domains of arts, science, mathematics and sports would help the state functionaries and schools to develop plan of action for nurturing the giftedness and talents in school children. A road map focusing on staff development programmes in schools, designing and implementing nurturance programmes to provide high quality resources and environment in schools through establishing linkages with institutes of higher learning, non-governmental organisations and other institutions has been formulated.

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

The educational roadmap was developed and tried-out in Chandel District, Imphal, Manipur in December, 2019. It was shared with the States or UTs for improving quality of elementary education of children residing in difficult terrains in the country especially in Scheduled Tribe populated areas. The



roadmap emphasised upon educational intervention in the classroom, teacher preparation, accessibility, strange thinking of school personal, role of parents along with administrative members by the state.

A five-day vetting workshop was conducted at NIE, New Delhi from February 24 to 28, 2020 to assess the quality of Hindi translation of the book *Including Children with Autism in Primary Schools: Teachers' Handbook* published by the NCERT. The Hindi translation has been finalised in the workshop and is being printed.

Identification Tool for Disability Conditions Recognised in RPWD Act, 2016

The project began with status survey wherein the States and UTs were contacted for getting information regarding the procedure adopted by them to collect information from schools regarding Children with Disabilities. Screening tool for all the 21 disabilities recognised in the Right of Persons with Disabilities (RPWD) Act, 2016 was developed. The draft tool and the insights gained from the survey were shared with experts of disabilities, doctors, speech therapists, psychologists, RCI representatives, regular teachers, resource teachers, SIE co-ordinators and teacher-educators. Tryout of the tool was done in thirty-five schools located in four states, viz., Delhi, Karnataka, Odisha and Meghalaya.



Workshop for the development of identification tool for disability condition recognised in RPWD

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

e-Learning Materials for Enhancing Geo-spatial Skills in Teaching-learning of Geography

Commemorating 150th birth anniversary of Mahatma Gandhi, the route map of *Dandi March* titled *Mapping March Satyagraha on School Bhuvan NCERT Portal* has been developed on satellite imagery available on *School Bhuvan NCERT Geoportal*. Through this digital map, students have been made aware of the famous *Salt Satyagraha*, entire route and the distance covered by Mahatma Gandhi and his followers from 12 March to 6 April 1930. The route map of *Salt Satyagraha* familiarises students with geographic location of different natural and human made features as well as their importance. Students have also been encouraged to develop similar kind of maps showing *Satyagraha* marches organised in other places of India during the national freedom struggle. Students have also been sensitised towards environmental pollution by developing a digital map titled *Delhi: Air Quality Index, 2019* highlighting problem of air pollution in Delhi. Students are encouraged to collect information from different sources to develop maps on environmental issues.

Sourcebook on Assessment in Social Sciences at Secondary Stage

While reforms in teacher training have been initiated as a parallel process, the challenge of changing the traditional system of examination and evaluation



has emerged as a major concern. The sourcebook attempts to focus on opportunities and scope for contemplation, discussion, and offering activities for hands-on experiences and thus, providing teachers and teacher-educators a new vision and approach for assessing children’s progress. The sourcebook also highlights the importance of co-operative classroom culture, peer learning and activity-based learning in the learning process at secondary stage.

Teaching-learning of Economics with Case Method for Senior Secondary Teachers

This material aims to encourage use of case studies for discussion purposes to engage students to look into socio-economic issues from multiple perspectives and understand how such issues are connected to their lives and provide opportunities to explore various economic issues both from their day-to-day life and also issues which are broader and invisible in nature. Teaching with case method provides an opportunity to reflect critically on issues in terms of their political, social, economic and moral aspects. It entails the acceptance of multiple views on socio-economic issues and a commitment to democratic forms of interaction. This is important in view of the multiple contexts in which our schools function. For instance, issues related to human rights, caste, religion and gender can be critically reflected on by children in order to see how these issues are connected to their everyday experiences, also how different forms of inequalities become compounded and are perpetuated. It facilitates collective decision-making through open discussion and by recognising multiple views.

Social Science Supplementary Reader on Why Pay Taxes?

The book, meant for secondary level students, has six chapters viz., (a) Why governments collect taxes? What governments do for people? (b) Income tax; (c) Goods and services tax; (d) Corporate tax, (e) Other taxes (Customs duty/excise/cess); and (f) What happens when we pay our taxes and afterwards? In each chapter, the legal issues, definition of technical terms used in the specific laws, examples of how people pay taxes are provided. It contains few activities and simple questions are provided to engage the learners. Important websites which are official and which provide support services related to payment of taxes and redressal mechanism are also provided.

Mahatma Gandhi: Life, Ideals and Values in English and Hindi

The booklet includes themes on— Knowing Gandhiji; Gandhian Philosophy and Principle: Relevance in Contemporary Times; The Making of Mahatma: Leaflets drawn from his Messages and Thoughts; and Learning by Doing. The booklet also contains many activities designed for children.

Health and Physical Education Textbook for Class X

This textbook focuses on holistic understanding of physical education and its relationship with other subjects and the effects of physical activities on human body. The book also provides a scope for children to learn the theoretical as well as the practical aspects of individual and team games. Further, it discusses yoga, dietary considerations, and safety measures for healthy living, social health, agencies and awards promoting health, sports and yoga. Keeping in view the inter-related nature of the concepts covered in the area of Health and Physical Education, the presentation of contents is made in a cohesive and an integrated manner rather than adopting a fragmentary approach. Experiential



learning activities for acquiring skills for healthy living are made an integral part of the book. The book contains 13 chapters.

Health and Physical Education Textbook for Class XI

This book focuses on holistic understanding of health and physical education, different individual and team games, yoga and its relevance in modern time and safety and security. Fitness development and fitness measurement tests, types of tournaments and competitions being organised at various levels are also covered in this book. Given the inter-related nature of the concepts covered in the area of health and physical education, efforts have been made to present the content in a cohesive and integrated manner. Experiential learning activities for acquiring skills in games, sports and yoga for healthy living have also been made an integral part of the book. While transacting this area, the teachers are expected to emphasise on developing life skills such as understanding self, social awareness, team building, co-operation, empathy, communicable skill, creative thinking and also development of values.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Scripts for the Modules of Training Package in Physics for Teachers Teaching at Higher Secondary Stage for Dissemination in MOOC Format

In its continuous endeavour to provide new inputs and insights to enrich teaching-learning in Physics, a five-day face-to-face training programme was conducted to orient the Key Resource Persons (KRPs) of various states of the country in physics at the higher secondary stage. The feedback obtained from the teachers participated in the training programme stated that the package used for the training was useful for training the teachers teaching Physics at the higher secondary stage. Therefore, it was felt that benefit of this package should reach to a larger number of teachers. Hence, a programme was taken up for converting the modules of the training package into MOOC format (four quadrants) for its wider dissemination. The first quadrant of each module has e-text, the second quadrant has questions for assessment, and third quadrant has weblinks related to the topic. For the fourth quadrant of the MOOC, 57 video scripts based on the 17 modules of the training package have been developed

Scripts for the Modules of Training Package in Biology for Teachers Teaching at Higher Secondary Stage for Dissemination in MOOC Format

A need-based training package in biology has been developed for the teachers teaching at the higher secondary stage. The package includes those topics and concepts which teachers find difficult to teach. The package suggests ways to transact difficult concepts in biology and provide some additional enrichment materials on such concepts. It comprises the concepts and key concepts of the topic, previous knowledge, suggested methodology of teaching along with activities or projects, etc. At relevant places in the units of the package, the problem of development of alternative concept (i.e., misconceptions) has also been discussed. Three quadrants of the modules based on the training package in biology have been developed on the 10 units of biology. First quadrant of each module has e-text, second quadrant has assessment, third quadrant has



weblinks related to the topic and fourth quadrant has videos. The scripts of all the modules have been developed as well as reviewed by the subject experts.

Audio/Video Resources on Experiments/Activities in Biology at Higher Secondary Stage (Class XI)

In today's digital age, technology enables us to transact learning resources in effective way and to reach out to large number of learners. In view of this, audio-video materials facilitate and promote use of technology in explanation of scientific concepts. The laboratory manual in biology at higher secondary stage has been prepared. Though experiments elaborated in manual can be performed easily, providing audio-visual material on these experiments can support students and teachers to further enrich their laboratory experiences. Audio-video materials facilitate practicing teachers to carry out the experiments supplementing hands-on approaches along with integration of ICT. Around 40 scripts based on experiments have been developed. Recording and editing work pertaining to audio-video material is being carried out by the CIET.

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

Audio-video materials based on the *Laboratory Manual* in Chemistry at 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 or activities. In all, 28 experiments or activities have been developed in Chemistry at higher secondary stage. These audio-video materials facilitate students and practicing teachers to carry out the experimental works supplementing hands-on approaches and integrating ICT.

Tactile Kit in Science at Upper Primary Stage

In order to achieve the goal of inclusive education, the department has identified and modified activities for visually impaired students at upper primary stage. These activities can be performed with the help of tactile kit. Various innovative and improvised items have been designed and developed for the kit that would help visually impaired children to perform activities and understand the science concepts better. This may encourage them to pursue a career in Science.



Workshop for development of tactile kit in Science at upper primary stage



Textbooks in Computer Science at Higher Secondary Stage

The NCERT has developed a new syllabus for Computer Science at Higher Secondary Stage. The textbook is being developed to promote programming skills among learners while understanding the foundational tenants of Computer Science. The textbook on *Computer Science for Class XII* has been finalised and after the approval of NCERT's textbook review committee, the final manuscript has been submitted to Publication Division of NCERT.

Textbooks in Informatics Practices at Higher Secondary Stage

The NCERT has developed a new syllabus of Informatics Practices for Higher Secondary Stage for developing data handling and data analysis skills among learners. The textbook *Informatics Practices at Higher Secondary Stage for Class XII* has been finalised after the approval of the NCERT's textbook review committee. The final manuscript has been submitted to Publication Division of NCERT for printing.

Tactile Books in Mathematics at Upper Primary Stage

In order to improve the teaching-learning processes in Mathematics for the visually challenged students, the department initiated the process of developing Mathematics tactile books for visually challenged students of upper primary stage. The tactile book for Class VI Mathematics has been published and publication of Classes VII and VIII Mathematics tactile books are in process.

Resource Material on Management/Conservations of Water at Upper Primary and Secondary Stages

An activity book *Water: Every Drop Counts* in English language and *Jal Har boond he Anmol* in Hindi language have been developed. The book include activities for learners at all stages of school education for imbibing and educating them about the conservation of water resource.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS**Teachers' Handbooks on Art Integrated Learning for (i) Primary (ii) Upper Primary Teachers**

The guidelines which contains conceptual framework with exemplars on different subjects and concepts through all was completed under 100 days agenda of NCERT and MHRD and was released in December 2019. The document in Hindi and English is available on NCERT website and is available as NCERT publication.

e-Content in Music for Classes XI and XII

The e-Content materials in Music on the titles, *Dhrupad-Raga Multani*— Ustad Wasifuddin Dagar (Padma Shri); *Pakhawaj*— Pt. Mohan Shyam Sharma; *Dhrupad-TevraTaal*— Ustad Wasifuddin Dagar (Padma Shri); *Dhamar - Raga Hindol*— Ustad Wasifuddin Dagar (Padma Shri); *Hindustani Sangeet ke Paribhashik Shabd*; *Choreography - To make Learning Interesting*; *Titli aur Kali*— Poetry and Movement; *Chhoti si Hamari Nadi*— Poetry and Movement; *Lok Geet - Himachal Pradesh*; *Lok Geet-Dogri - Jammu*; *Lok Geet-Assamese - Bihu*; *Lok Geet - Bihar Chhatt Puja*; *Lok Geet - Maharashtra - Lavani*; *Lok Geet -*



Arunachal Pradesh; and *Lok Geet – Karnataka* (Devotional) have been developed, edited and uploaded.

DEPARTMENT OF GENDER STUDIES

Transformatory Material for Awareness Generation and Attitudinal Change with Respect to Gender (2018–2020)

The concern for gender equality or 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 gendered attitude of teachers also plays a major role in the personality development of children. The transformatory material in the form of posters and booklets, viz., Menstrual Health— Taboos and Acceptance, I am what I am, Transgender Issues, Change makers, Tackling Violence (Physical and Emotional), Attitudinal Changes, etc., for awareness generation and attitudinal change is being developed. Such materials are likely to impact perceptions of teachers or teacher-educators and how they project their own attitudes, beliefs and practices in the classroom and beyond.

DIVISION OF EDUCATIONAL KITS

Video Guide on the use of Secondary Science Kit

The video guide will help students to use the science kit effectively. They will be able to use the material to understand the underlying concepts. It enables students or teachers to learn different themes, on food materials; and the world of the living; how things work; moving things, people and ideas; and natural phenomena. The scripts for the video guide have been developed in workshop mode and are ready for the production of the videos by CIET.

Video Guide on the use of Secondary Mathematics Kit

The video guide intends to help students to use the science kit effectively. They will be able to use the material to understand the underlying concepts. It helps students or teachers to learn different themes such as number system, algebra, geometry, and trigonometry. Scripts for the video guide have been developed and are ready for the production by CIET.

Revision of Specification of Kit Items (Science and Mathematics)

The programme was undertaken to revise the specifications of the kit items of Science and Mathematics at upper primary, secondary and higher secondary stage Based on the feedback received from the users since past few years two workshops were conducted in which items of upper primary, secondary and higher secondary Science and Mathematics kits along with ECE kit were reviewed and suggestions were given by the experts for modification.

LIBRARY AND DOCUMENTATION DIVISION

NCERT Institutional Repository

The objective of the programme is to make available NCERT publications as institutional repository for long-term use. This collection manifests the scale



of the NCERT's success and achievement in the area of school education. As it was approved after due analysis that digitisation work should be done through outsourcing, the tender document for digitisation work for NCERT material was prepared and invited by LDD. Scanning of nearly 80,000 pages and cropping, editing and PDF conversion of nearly 40,000 pages have been completed. The work of uploading in D-Space software and searchable format will be completed during the year 2020–21.

Interlinking of all NCERT Libraries—Union Catalogue of Libraries of NCERT and its Constituent Units

The objective of the programme is to shift from proprietary software (LIBSYS) to open source software (KOHA), to design and develop the Union Catalogue of Libraries and host in any Cloud Platform for universal on-line access, to support resource sharing among the member libraries of books and online journals (print and electronic both). The procurement of hardware (Higher end Desktop and OPAC KIOSK) has been done at RIE, Mysuru, Ajmer, Bhopal, Bhubaneswar (for DMS also), NERIE, CIET and implementation of KOHA has been initiated at all constituent units. Data migration is completed in RIE (Ajmer, Bhubaneswar, Bhopal, Mysuru) and DMS, Mysuru. Data Conversion is in progress at DMS, Ajmer, CIET, LDD and NERIE and Data validation work is in progress in RIE, Bhopal. RIE, Mysuru Library WEB-OPAC at KOHA is visible (<http://koha.riemysore.ac.in/>). Installation of KOHA was also completed in LDD and CIET. Data Filtration work is in progress in LDD. After completion of migration of data from LIBSYS to KOHA, interlinking of all NCERT libraries will be done.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Tamanna: An Aptitude Test for School Students

Aptitude test called *Tamanna* has been developed on seven identified dimensions, namely—verbal aptitude, abstract reasoning, numerical aptitude, perceptual aptitude, mechanical reasoning, spatial aptitude, and verbal reasoning. A Technical Manual has been prepared giving details of standardisation of the test. The standardisation of the Aptitude Test is based on the data collected on 3,482 students of Class IX and 2,039 students of Class X in five different types of schools, namely, Kendriya Vidyalayas, Navodaya Vidyalayas, Multipurpose Demonstration Schools (RIEs), CBSE-affiliated Schools and State Board affiliated Schools. Data were collected from 11 different locations in the different regions of the country (Ajmer, Bhubaneswar, Delhi, Gurugram, Mysuru, Bhopal, Noida, Lucknow, Jammu, Ranchi and Shillong). A Guide for Teachers has been developed giving details of administering the test, scoring and interpreting the results. The test was piloted by the CBSE with around 17,000 students studying in Classes IX and X in its affiliated schools across different parts of the country. Two videos have also been developed to familiarise school principals and teachers with different aspects of this aptitude test. Hindi version of the aptitude test has also been developed and is being finalised for publication.



Online Course on Value Education

The programme aims at developing modules and modalities for offering an online course on value education in schools. Ten modules have been developed, i.e., Value Education: Concept and Concerns; Building and Understanding of Core Values; Whole School Approach to Value Education; Understanding Value Development Process; Self-awareness and Self-empowerment; Strategies Skills for Value Development; Essential Skills for Value Development; Frontiers of Value Education; Pedagogy for Value Education; and Assessment of Value Education. Twenty-four scripts for video recording on the above themes have been developed and reviewed. Certificate Course will be launched as per the Massive Open Online Course (MOOC) format.

Reading Material for Teacher Counsellors on Dealing with Behavioural Issues among School Adolescents

The objective of the programme was to develop materials for effectively dealing with behavioural problems of students at secondary or senior secondary level. Reading materials for teacher counsellors have been developed on such themes as managing anger and aggression, dealing with conflicts, and dealing with truancy and its related behaviour.

DEPARTMENT OF TEACHER EDUCATION

Learning Outcomes at Secondary and Senior Secondary Stages

The objectives of the development programme were to develop learning outcomes for secondary level and to orient the States/UTs towards learning outcomes and their use. Learning outcomes for secondary stage (Classes IX and X) in the subjects (Hindi, English, Sanskrit, Urdu, Science, Social Science, Mathematics, Health and Physical Education and Art Education) have been developed in co-ordination with all units of NCERT. The document was uploaded on NCERT website to invite suggestions from the stakeholders from all over the country. On the basis of these suggestions, a national consultation meet was held and the suggestions were discussed and incorporated based on their merit. The finalised *Learning Outcome* document was released by the MHRD and uploaded on the NCERT website.

PLANNING AND MONITORING DIVISION

Online Course on Instructional Strategies for Mathematics and Statistics in Economics

With the intention 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/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 video lectures for the template unit along with the ICT resources is being finalised. All modules will be converted in the similar line and enriched with ICT resources. The course shall be finalised after piloting.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Educational Media Programmes

The institute develops educational audio-video media programmes and disseminates through multiple modes: e-Pathshala NISHTHA, DIKSHA, NCERT Official YouTube Channel, SWAYM, HOOLS Platform, SWAYAM Prabha, DTH-TV Channels, GyanVani Radio, Community Radio platforms, Mobile apps, etc. Till March, 2020 a total of 18 audio and 325 video scripts were discussed and vetted. About 700 audio programmes including 18 audio books and 597 video programmes were developed. About 300 e-Contents of various organisations were reviewed in which content of National War Memorial (photographs, videos, document) and Learning Content Material of DigiAbhyas (document and videos) were also reviewed.

e-Resources for the School and Teacher Education

The development of various kinds of e-Resources like, graphics, illustrations, comic books and other 3D illustrations were undertaken for dissemination in multiple modes. Illustrated stories on Hindi textbooks of Class IV and V have been developed and a total five such stories have been created. Twelve story boards have been developed for comic book on Mathematics for Class III for Manipur State. Digital Comic Strip on 'Discover Gandhi' has been developed in collaboration with DESS-NCERT. About 54 augmented reality contents have been developed and uploaded on AR app and 26 AR contents are under the development process (audio to be recorded and synchronised). Nearly 80 AR-based e-Content related to Classes IX–X Science textbooks have been developed and have been embedded in NCERT textbooks. A field trial of the same has also been conducted at KV-JNU to obtain feedback on the AR Content. The e-Pathshala AR app was also launched by the Hon'ble Minister of State for HRD, Sh Sanjay Dhotre, Government of India on 23 December, 2019.

ICT in Education Curricula Implementation in States/UTs

Under the aegis of Department of School Education and Literacy, MoE, Government of India, the curricula for ICT in Education for school system has been developed to build ICT completeness among various stakeholders of education. As part of this programme, the first draft of State specific ICT in Education Curriculum for Teachers was developed in workshop mode on 29–30 April, 2019 in which participants from 12 States participated. A training-cum-workshop on 'Designing ICT Interventions for Teaching, Learning and Assessment' was conducted from 3 to 7 June, 2019 and 55 ICT awardees



were trained. ICT in Education Curriculum for students was customised for implementation in the State of Karnataka. A core team was trained in Karnataka to plan the implementation of student course content. Induction 1 of teachers' course and year-1 of students' course were reviewed by updating and customising based on the learning from the implementation in Karnataka.

Model for ICT Integrated School System

Training-cum-workshops on 'Designing ICT Interventions for Enhancing Teaching, Learning and Assessment' was conducted in four phases in each of the four Demonstration Multipurpose Schools (DMSs) (located in RIE campuses at, Bhubaneswar, Bhopal, Ajmer and Mysuru). All DMS teachers and 70 National ICT Awardee teachers from across the country have been oriented. As a part of collaboration project with Obel school, Israel, a workshop was conducted at DMS, Mysuru for students to explore and learn technology through peer learning and project learning. Collaboration projects for DMS, Bhopal and DMS Bhubaneswar have also been planned. Digital material on EVS, Maths and English were identified as per the NCERT syllabus. Safer Internet Day was celebrated in all the DM Schools and RIEs by taking a pledge. Pilot implementation of Digital games for education was conducted with the primary students of KV, NCERT campus.

Resources and Support for Web and Online Activities

CIET has been instrumental in the development and maintenance of web portal and mobile apps for NCERT and other organisations. Under this, 14 web-portals and nine mobile apps were developed on a regular basis. Two apps (NISHTHA, e-pathshala AR) and a portal (<http://nishtha.ncert.gov.in/>) have been developed. All India Surveys of Research in Education have been digitised and uploaded (<http://osre.ncert.gov.in/>). More than one hundred researches and ERIC research reports were analysed and abstracts prepared and uploaded on the online survey of research in education portal.

PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

Student Textbook on Domestic Biometric Data Operator (QP: SSC/Q2213) in IT/ITeS Sector for Class XI

The textbook of *Domestic Biometric Data Operator*, Class XI has been developed in collaboration with WYSE Biometrics Pvt. Ltd., Pune. The textbook has been developed to impart knowledge and skills in operating biometric devices, biometric data entry and processing. It consists of 16 sessions in the four units. It covers the topics on types of biometric data, various biometric devices, capturing the various types of biometric data, procedures and tools for biometric data capture and processing, maintenance of biometric devices, using the biometric devices in the network and internet, etc. The textbook was developed after taking necessary inputs from the biometric industry.



Curriculum and Textbook on Field Technician Computing and Peripherals (QP:ELE/Q4601) in Electronics Sector

The curriculum on *Field Technician Computing and Peripherals* for Class XI and XII was developed after detailed deliberation with experts in the workshop. The curriculum aims to provide the skills in computer hardware installation and maintenance. It consists of learning outcomes for installation and maintenance of computer system including laptop and tablets. It also includes the installation, maintenance and troubleshooting of operating system such as Windows and Linux as well as server operating system such as Windows server and Linux server. Further, the course covers the topics on computer networks, IT security and ITILv4. The textbooks for Class XI and Class XII are being developed.

Student Textbook on Domestic Biometric Data Operator (SSC/Q2213) for Class XII in IT-ITeS sector

The student textbook on *Domestic Biometric Data Operator* (SSC/Q2213) for Class XII in IT-ITeS has been developed. The draft textbook is ready which will be further reviewed. It consists of four units which consist of the contents such as using the biometric devices for preparation of *aadhaar* card, passport, driving license and school ID card. It also contains the knowledge and skill of using fingerprint biometric device along with the advanced biometric technology applications such as face recognition.

Students' Workbook of Customer Service Executive (Meet and Greet) for Class XI and XII

The Students' Workbook of *Customer Service Executive (Meet and Greet)* Class XI and XII in context is a part of the two year NSQF curriculum of Customer Service Executive (Meet and Greet) job role under the sector of Travel, Tourism and Hospitality. The curriculum developed for this job role was shared with the experts and the units developed for Class XI were reviewed, proof read and corrections incorporated for finalisation. The Class XI book has four units on Introduction to Tourism Industry; Introduction to Hospitality Industry; Customer Service; Prepare for Providing Customer Service. The Class XII book has six units on Etiquette and Hospitable Conduct; Gender and Age Sensitive Service Practices; Health and Hygiene; Safety at Workplace; Learn a Foreign or Local Language including English; and Customer Centric Services.

Student Textbooks of Class XI and XII for the Job Role 'Specialised Sewing Machine Operator'

Specialised sewing machine operator works on different specialised machines like button-hole, bar-tack, button sewing, embroidery, feed of arm, interlock machine, etc. These machines are used in garment industries, boutiques, workshops, etc., to stitch, finish and decorate the garments and other articles. Course content of these textbooks mainly covers: production technology, various types of sewing machines and their operating system, maintenance of work area, tools and machines, use of specification sheet, health and safety measures, quality control, etc.

Student Textbook on Employability Skills for Class XII

The textbook on *Employability Skills* for Class XII, covers communication, self-management, information and communication technology, entrepreneurial



and green skills. It has been developed as per the learning outcome based curriculum developed by PSSCIVE for the vocational subjects. A Working Group Meeting of experts for review and finalisation of student textbook was held from 10 to 12 June, 2019 at PSSCIVE, Bhopal.

Module on ‘Manufacturing and Sale of Sanitary Napkin’

The module on ‘Manufacturing and Sale of Sanitary Napkin’ has been developed to bring about awareness on the types and importance of sanitary napkins and to provide knowledge and skills on various aspects of manufacture and sale of sanitary napkin through hands-on training and also for starting a small enterprise. A Working Group Meeting of experts for review and finalisation of the module on Manufacturing and Sale of Sanitary Napkin was held from 13 to 14 June, 2019 at PSSCIVE, Bhopal.

Student Textbook of Unarmed Security Guard for Class X

The student textbook of Unarmed Security Guard for Class X covers the hygiene and safety aspects for the unarmed security guard, guidelines for documentation and access control, traffic control and parking system, and security in Industry and commercial deployment. A Working Group Meeting of experts for review and finalisation of Student Textbook for the Job Role of Unarmed Security Guard was organised from 12 to 14 June, 2019 at PSSCIVE, Bhopal.

Digital Resources for Vocational Subjects for Class IX and XI

Video films were developed for the job roles of Hand Embroiderer, Sales Associate, Store Operation Assistant, Field Technician— Wireman Control Panel, Automotive Service Technician— Two and Three Wheeler, General Duty Assistant, and Plumber General. A video film on *Overview of Communication Skills* which is one of the modules of Employability Skills curriculum was also developed. The digital resources are available on the website of PSSCIVE – psscive.ac.in.

Curriculum for the Job Roles on (i) Field Technician: Air Conditioner (ELE/Q3102), (ii) Field Technician: Refrigerator (ELE/Q3103), (iii) Field Technician: Washing Machine (ELE/Q3106)

The curricula for the job roles on (i) Field Technician: Air Conditioner (ELE/Q3102), (ii) Field Technician: Refrigerator (ELE/Q3103), (iii) Field Technician; Washing Machine (ELE/Q3106) was developed after detailed deliberation with experts. The curricula consist of the topics on basic fundamentals, installation, maintenance and troubleshooting of air conditioner, refrigerator and washing machine.

Student Textbook on Roto Artist (QP: MES/Q3504) in Media and Entertainment Sector for Class XI

The student textbook on Roto Artist for Class XI in Media and Entertainment Sector was developed keeping in view of the NOSs of Qualification Pack of Roto Artist. The textbook consists of 16 chapters in four units namely— Rotoscoping Technique of Animation and Visual Effects, Creative and Technical Requirement, Rotoscoping Basics, Workplace Health and Safety for Rotoscopy.

Curricula for Different Job Roles of Agriculture Sector

The draft curricula of Mango Fruit Grower, Citrus Grower, Spice Crop Cultivator and Pulses were developed in-house and a review meeting was organised with



experts from Agriculture Universities and scientists from ICAR institutions. The learning outcome, based curricula for the job roles were developed and reviewed. The experts reviewed the curricula and incorporated changes wherever required.

Student Textbook of Tour Guide for Class XII

The student textbook of Tour Guide for Class XII contain nine units along with practical activities and practical exercises including multiple choice questions, fill in the blanks, true or false, short answer type questions, long answer type questions and check your progress. The nine units developed are: Guide the Tourists for Sporting Events; Guide Tourists during Gastronomy Tours; Guide Tourists during Cultural Tours; Guide Tourists on Desert Tours; Guide Tourist on Wellness and Medical Tours; Communication with Customers and Colleagues; Etiquette and Hospitable Conduct; Gender and Age Sensitive Service Practices; and Safety and Security.

Student Textbook for Microfinance Executive for Class IX and Business Correspondent and Business Facilitator for Class XI, WGM-I

A Working Group Meeting was organised at the Institute for the development of two Textbooks titled *Microfinance Executive* for Class IX and *Business Correspondent and Business Facilitator* for Class XI from 12 to 16 March, 2020. Eight draft units of the two books have been developed. The textbook on Microfinance Executive contains Introduction to Banking and Microfinance System; Sources of New Customers; Microfinance Application Process; and Disbursement of Microfinance Loan. The textbook on Business Correspondent and Business Facilitator contains Introduction to Banking; Sources of New Customers; Verification of Preliminary Information; and Process of Banking Application.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Environmental Education Theme Park for Strengthening School Education Programme and Sensitising School Children for Generating Environmental Awareness

The objectives of the programme is to maintain the environmental educational park that include aquatic, desert and terrestrial ecosystems, medicinal plant conservatory, centre for demonstration of rain water harvesting, conservation of water and soil, organic farming, etc.; to enable the students, teacher-educators and visitors to perform simple environment education-related activities and to educate teachers, students and the community of the need to conserve and protect the environment. A *mela* on the theme *Panch Tatva* was organised on 26–27 February in which students from the local school of Ajmer city were invited.

e-Resources for the School and Teacher Education Curriculum

This programme has been planned to develop e-resources for school and teacher education curriculum. Various stages of school education such as primary, upper primary, secondary and senior secondary have been covered including subjects like science, social science, mathematics and languages. Total 30 audio-visual programmes have been prepared and sent to the NCERT.



Institutional Repository of RIE, Ajmer

Programme Advisory Committee (PAC) reports, dissertation work of M.Ed. students, voluntarily contributed publications of Institute faculty, archive collection of NCERT and University question papers for various pre-service courses have been digitalised in the Institutional Repository of RIE, Ajmer Library.

Muskurata Bachpan: A Programme for Pre-school Education

The session of 2019–20 started from May 2019 and 40 children admitted to the pre-primary sections (20 children at Level 1 and 20 children at Level 2). Two Pre-school Teachers (trained in ECE) and two helpers were appointed for the programme and were given five-day induction training. Teachers developed various teaching-learning materials as per the theme selected for teaching and also conducted monthly parent teacher meeting.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Science Park

The science park provides a natural and free environment for students to learn and familiarise with different scientific concepts. Thirteen new colourful interactive science models were built in the science park with the help of three workshops. Apart from it, five sculptures of famous Indian Scientists and animal structures out of scrap (waste) were also built in the park.

Institutional Repository of RIE, Bhopal

In order to promote wider on-line access and visibility of research output of RIE, Bhopal and to preserve the institute is publications like M.Ed. dissertations, PAC reports, ERIC reports, faculty publications, etc., the digital repository has been established. So far, more than 300 documents have been scanned, processed and uploaded to the repository. The Institutional Repository has been connected to the intranet of the institute and accessible to the teachers and students within the campus via using local Wi-Fi or LAN network. Within the institute, the users can access the Institutional Repository (IR) through the link <http://172.30.9.200:8021/jspui/>

Handbook on Multilingual Education for the Aspirational district Narmada and Dahod at Primary School Level

In the formal government schooling system, the medium of instruction is mostly state language. In the aspirational districts, Narmada and Dahod, the language of instruction is Gujarati, Hindi and English. The mother tongue of tribal areas is different from their school language. It creates a gap between teachers and learners in terms of understanding. Keeping this in view, a handbook to fill up the gap between mother tongue and instructional language has been prepared.

Mathematics Practical Manual for B.Sc.B.Ed.

The programme was undertaken with the objectives to develop a framework for practicals in Mathematics for the students of B.Sc.B.Ed. by using specialised softwares like Mathematica, SciLab, MathLAB, etc. The manual has been developed keeping in mind the Mathematics syllabus of B.Sc.B.Ed. course. Different concepts in Mathematics syllabus was identified and divided into different chapters. The manual is divided into chapter keeping in view based on



the Mathematics syllabus and each chapter is further divided into sub-units. The objective of the manual is to make the learners acquainted with different Mathematics software and learn the practical aspects of Mathematics. They will be able to integrate Mathematics with other Science subjects and solve real life mathematics problems.

Resource Centre for Arts and Crafts at RIE, Bhopal

The resource centre functions with the objectives to provide opportunities and resources to students, teachers, teacher-educators and members to explore, experience and understand arts and crafts and its place in education, to integrate arts and culture in schools, teacher education institutions, to promote local and regional art forms by bringing it into the formal education system, etc. During the year, three workshops were organised for developing arts and crafts materials with the help of various artists from the States of Chhattisgarh, Gujarat and Maharashtra.

e-Resources for the School Curriculum, Teacher Education Curriculum and Training of Key Resource Persons of Western Region

The RIE, Bhopal maintains a studio for the production of audio, video and digital resources, orientating the students, faculties and teacher-educators on developing digital resources and also to digitalise print and non-print resources for wider use. Thirty-five e-Contents related to school education and teacher education were developed. Two e-Contents viz., *Aagariya: Aag se Aarambh and Angon ki Hadtal* developed in the studio won the national awards in AICEAV Film Festival 2019 organised by CIET, NCERT, New Delhi. In addition, the studio is engaged in shooting of the day-to-day activities of the institute including the training, workshops, seminars and various days celebrated or organised in the institute.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

Handbook on Field Engagement in Pre-service Teacher Education in Odisha

The handbook has been developed based on need assessment and workshop. Different framework and policy documents like *NCF 2005*, *NCFTE 2009*, *RTE Act 2009*, *NCTE Regulations 2014* and *Samagra Shiksha 2018* formed the basis for preparation of the handbook. The handbook consists chapters on conceptual framework of field engagement, planning and organisation of school internship, multicultural placement and field work with community programme. The handbook will be utilised as a resource material for teacher-educators of Odisha.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

e-Resources for the School and Teacher Education Curriculum

Eleven video programmes were produced on various topics for the Certificate Course in Educational Research Methodology offered by the Inter University Centre for Teacher Education, RIE, Mysuru. This certificate course in Educational Research Methodology is meant for educational functionaries who



have the responsibility to conduct research at various levels of education. They may be trainers and teacher-educators working at the block, district and state levels in institutions such as Schools, BRC, DIET, CTE, IASE, SIE/SCERT and State and Central Universities. The videos and the documentary were developed for teachers and teacher-educators at various levels. A documentary titled '*Kaliyuva Mane: A Home for Learning and Transforming Life*' has been prepared that depicts best practices of an alternative school named Kaliyuva Mane located in Kenchalagudu village, Mysuru district. Under the theme 'Key concepts in education', the videos viz., Discourse, Discourse Analysis, Feminism, Ideology, and Existentialism have been prepared. A video titled 'Education as black box' and 10 videos on various modules for the 'Certificate of Educational Research Methodology' have also been developed.

NORTH-EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM

Sustainable Development Goals (SDG) Module for Secondary Level for Key Resource Person of North-Eastern States

The specific objective of this programme was to develop a module based on sustainable development goals for Key Resource Persons which is specific to North-Eastern States. The module has been developed through a workshop mode for the States of Assam, Arunachal Pradesh, Meghalaya and Sikkim. The module contains the best as well as the innovative practices carried out in the State of Arunachal Pradesh, Assam, Meghalaya and Sikkim in the light of SDGs: 2030, with special reference to SDG4.

e-Resources for the School and Teacher Education Curriculum

NERIE is equipped with a fully functional studio similar to the facilities available in other RIEs. During the year 2019–20, e-Resources have been developed. The videos on Science of Class IX, Chapter 14— Natural Resources: Nitrogen Cycle, Carbon Cycle, Oxygen Cycle, Natural resources and its types, Soil, Ozone Layer; Chapter 15— Animal Husbandry, Concentration of a Solution, Improvement of crop yields and Types of Mixture; Social Science Class IX (India and the Contemporary World-1) Section II— Chapter 4— Forest Society and Colonialism and Drainage have been developed.

Twenty-nine videos have been re-edited for Sign Language. The videos on Oxygen Cycle, Nitrogen Cycle, My Relationship with Bamboo, Improvement in Crop yield, Concentration of Solution, Carbon Cycle, Animal Husbandry, and a different world developed by NERIE, were sent to the 24th All India Children's Educational Audio Video Festival (AICEAVF). The video titled *Nitrogen Cycle* was nominated in the VP-DW Manthan Category of the 10th edition of National Science Film Festival of India (NSFFI) organised by Vigyan Prasara.

Dynamic Website for Tracking of Programmes, Creating Programme Data-base, and Sharing and Feedback Mechanism

The objectives of the programme were— to build a mechanism for tracking all programmes conducted by the NCERT, to create a sharing and feedback mechanism about a programme for all stakeholders, to create e-database of programmes conducted by the NCERT, to provide a platform to states to upload details of programmes conducted by the states and to maintain



and operate the website. The NCERT conducts programmes for teachers, teacher-educators, researchers, students and also other stakeholders in the area of school education and teacher education. The Programme Management Information System (PMIS) keeps record of these programmes and it also will allow interactions between the participants and programme co-ordinators.

The PMIS project was first started in 2017–18, when in a meeting at NERIE, the NIC, Meghalaya, proposed to develop the platform. The detailed project proposal was submitted by NIC, Meghalaya and thereafter approved by the NCERT. No budget was proposed for 2018–19 as NIC, Meghalaya started the work in September 2018 with the budget transferred to them at the end of March 2018. Several discussions and meetings took place at NIC, Meghalaya, Shillong office and in NERIE during the development of the PMIS. NIC, Meghalaya had demonstrated the first phase of the PMIS website at NERIE on 31 January 2020. Also, NIC, Meghalaya team conducted training on how to use the PMIS website, for NERIE faculty members on 5 February, 2020 at NERIE.

The PMIS website was inaugurated by Shri Ramesh Pokhriyal 'Nishank', Hon'ble HRD Minister, Government of India and Shri Lahkmen Rymbui, Hon'ble Minister of Education, Government of Meghalaya on 14 February, 2020 at a function in North Eastern Hill University, Shillong. The PMIS is linked to NERIE website: <http://nerie.nic.in/> and will run for few months for NERIE as pilot basis for fixing bugs and improving further.

Handbook on 'Experiments and Learning Outcomes in Science' at Secondary level

The programme was proposed based on the importance of understanding the concept of learning outcomes and to help in dealing with cognitive, psychomotor and affective domains through experimental learning in Science at secondary level. The handbook has been prepared in workshop mode which includes selected activities for Class IX and X with the learning outcomes and assessment techniques.





5. Capacity Building Programmes

With a view to reduce the gaps that exist between the curricular pronouncements and the ground realities, the NCERT organises capacity building programmes for the stakeholders of education. The Council had organised a mega capacity building programme 'NISHTHA' for the capacity building of teachers and school heads at Elementary level on learner-centred pedagogies to improve learning outcomes of students. Constituents of the Council take up training programmes aiming at updating knowledge in the subject areas, dealing with methodological and pedagogical concerns, continuous assessment, inclusive education and imparting appropriate technology and pedagogic practices in the classrooms. The training programmes equip stakeholders with relevant skills, ability to plan, organise, manage and evaluate classes and also for sensitising towards social issues and concerns, thereby providing continuous professional development. There are programmes that take the form of regular training courses in the areas of guidance and counseling, action research and also in specialised areas, for instance, in Indian sign language, gender issues in education, vocational pedagogy, implementation of vocational education, paddy farmer in agriculture sector, automobile technology, store operations assistant and sales associate, apparel made-ups and home furnishing sector job role, action research, research methodology, inclusive education, science, mathematics, social science, educational kits, etc. The Council is also running various online and blended courses, viz., in Science Education, Environmental Studies, Action Research etc.

National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA)

The mega capacity building programme for 'Improving Quality of School Education through Integrated Teacher Training' aims to build capacity of teachers and school heads at elementary level on learner-centred pedagogies to improve learning outcomes of students. It also includes system level functionaries at the state, district, block, cluster level. The training is being organised by the NCERT constituting National Resource Groups (NRGs) and State Resource Groups (SRGs) at the National and the State level with the aim of imparting training to 42 lakh teachers. A robust portal or management Information System (MIS) for delivery of the training, monitoring and support mechanism has also been infused with this capacity building initiative. In the year under report, in 30 States or UTs the NISHTHA training programme has been launched. Twenty-two States or UTs have completed training of KRPs and SRPs-L and Block level training programme has been initiated in 18 States or UTs. A total of 2501 SRPs-L, 12570 KRPS, 408933 teachers and 42782 Heads and Principals have been trained under the programme.



Inauguration of NISTHA by the Minister of HRD Shri Ramesh Pokhriyal 'Nishank'



Training of SRGs of UTs



Training of SRGs of Delhi



Training of SRGs of Jharkhand



Technical Training Programme for State Administration



Training of SRGs of Gujarat



Training of SRGs of Tripura



NISHTHA Programmes Conducted				
S.No.	State or UT	Venue or Date	Chairperson or Co-Chairperson	Co-ordinators
1.	UTs and Goa	NCERT, New Delhi 21-25 August, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor
2.	Delhi-1	NCERT, New Delhi 3-8 September, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor
3.	Haryana	Gurugram 4-9 September, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Meenakshi Khar, Associate Professor Neelkanth Kumar, Assistant Professor
4.	Jharkhand	Ranchi 11-16 September, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Laxmi Dhar Behra, Professor Sukhvinder, Associate Professor
5.	Tamil Nadu	Hyderabad 16-28 September, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjula Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venu Gopal, Professor T.V. Somashekhar, Assistant Professor
6.	Tamil Nadu	Hyderabad 16-28 September, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjula Rao, Professor	T.V. Somashekhar, Assistant Professor P.D. Subhash, Associate Professor Kalpana Venugopal, Professor
7.	Bihar	Patna (SCERT) 20-25 September, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor and Head, DEK	Laxmi Dhar Behra, Professor Sukhvinder, Associate Professor
8.	Gujarat	Bhavnagar 23-28 September, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor
9.	Gujarat	Bhavnagar 23-28 September, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Meenakshi Khar, Associate Professor Neelkanth Kumar, Assistant Professor
10.	Manipur	Imphal 24-28 September, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
11.	Uttarakhand	Dehradun 26-30 September, 2011	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
12.	Haryana	Gurugram 26-30 September, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor





13.	Mizoram and Sikkim	Guwahati 30 September–5 October, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
14.	Rajasthan	Udaipur 3–7 October, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ayushman Goswami, Professor Usha Sharma, Professor Ram Babu Pareek, Associate Professor
15.	Rajasthan	Udaipur 9–13 October, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Shashi Prabha, Professor Neelkanth Kumar, Assistant Professor
16.	Assam	Guwahati 10–14 October, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
17.	Himachal Pradesh	Shimla 14–18 October, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ayushman Goswami, Professor Usha Sharma, Professor
18.	Assam	Guwahati 17–21 October, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor
19.	Rajasthan	Udaipur 18–22 October, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Laxmi Dhar Behra, Professor Sukhvinder, Associate Professor
20.	Himachal Pradesh	Shimla 19–23 October, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Meenakshi Khar, Associate Professor Neelkanth Kumar, Assistant Professor
21.	Assam	Guwahati 29 October–2 November, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
22.	Meghalaya	Shillong 29 October–2 November, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Tulika Dey, Assistant Professor Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
23.	Uttarakhand	Dehradun 29 October–2 November, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor Ashish Srivastava, Assistant Professor
24.	Haryana	Gurugram 30 October–4 November, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
25.	Odisha	Bhubaneswar 1–5 November, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Laxmi Dhar Behra, Professor Sukhvinder, Associate Professor Ms Elizabeth Gangmai, Assistant Professor

26.	Rajasthan	Udaipur 2-6 November, 2019	S.V. Sharma, Professor Sharad Sinha, Professor	Padma Yadav, Professor Ramesh Kumar, Associate Professor
27.	Assam	Guwahati 4-8 November, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
28.	Uttarakhand	Dehradun 4-8 November, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Professor Ayushman Goswami, Professor
29.	Tamil Nadu	Hyderabad 4-8 November, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjul Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venugopal, Professor T.V. Somashekhar, Assistant Professor
30.	Assam	Guwahati 11-15 November, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
31.	Jammu and Kashmir	Jammu 14-18 November, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Professor Ayushman Goswami, Professor
32.	Telangana	Hyderabad 18-22 November, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjula Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venugopal, Professor T.V. Somashekhar, Assistant Professor
33.	Punjab	Chandigarh 18-22 November, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
34.	Uttar Pradesh	Meerut 19-23 November, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Laxmi Dhar Behra, Professor Elizabeth Gangmai, Assistant Professor
35.	Rajasthan	Udaipur 20-24 November, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Professor Ayushman Goswami, Professor
36.	Punjab	Chandigarh 25-29 November, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	Romila Soni, Associate Professor Jitender Patidar, Assistant Professor
37.	Uttar Pradesh	Prayagraj 26-30 November, 2019	S.V. Sharma, Professor Sharad Sinha, Professor	Sarbari Banerjee, Assistant Professor Shashi Prabha, Professor Ramesh Kumar, Associate Professor
38.	Telangana	Hyderabad 26-30 November, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor



Annual Report 2019-2020



39.	Bihar	Patna (Scert) 28 November–2 December, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	R.K. Sharma, Assistant Professor Meenakshi Khar, Associate Professor Neelkanth Kumar, Assistant Professor
40.	Odisha	Bhubaneswar 29 November–3 December, 2019	Amarendra Behera, Professor Shatrupa Palit, Associate Professor	Arnab Sen, Assistant Professor Satya Bhushan, Assistant Professor
41.	Telangana	Hyderabad 2–6 December, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Sukhvinder, Associate Professor Laxmi Dhar Behra, Professor Elizabeth Gangmai, Assistant Professor
42.	Rajasthan	Udaipur 3–7 December, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
43.	Maharashtra	Lonawala 4–8 December, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Associate Professor Ayushman Goswami, Professor
44.	Odisha	Bhubaneswar 4–8 December, 2019	Y. Sreekanth, Principal, RIE, Mysuru Manjula Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venugopal, Professor T.V. Somashekhar, Assistant Professor
45.	Telangana	Hyderabad 8–12 December, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
46.	Rajasthan	Udaipur 9–13 December, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor Jitender Patidar, Assistant Professor
47.	Uttar Pradesh	Lucknow 10–14 December, 2019	Mo. Faruq Ansari, Professor V.P. Singh, Professor	Laxmi Dhar Behra, Professor Elizabeth Gangmai, Assistant Professor Sukhvinder, Associate Professor
48.	Uttar Pradesh	Varanasi 10–14 December, 2019	S.V. Sharma, Professor Sharad Sinha, Professor	Sarbari Banerjee, Assistant Professor Shashi Prabha, Professor Ramesh Kumar, Associate Professor
49.	Tamil Nadu	Chennai 10–14 December, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjula Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venugopal, Professor T.V. Somashekhar, Assistant Professor

50.	Tirpura	Agartala 11-15 December, 2019	Amrendra Behera, Professor Shatrupa Palit, Associate Professor	Satya Bhushan, Assistant Professor Arnab Sen, Assistant Professor
51.	Maharashtra	Pune 12-16 December, 2019	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
52.	Nagaland	Dimapur 17-21 December, 2019	Amredra Behera, Professor Shatrupa Palit, Associate Professor	Tulika Dey, Assistant Professor Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
53.	Jammu and Kashmir	Jammu 17-21 December, 2019	Saroj Yadav, Professor Anupam Ahuja, Professor	Romila Soni, Associate Professor Jitender Patidar, Assistant Professor
54.	Karnataka	Mysore 17-21 December, 2019	Sumiti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
55.	Gujarat	Ahmadabad Gandhinagar 17-21 December, 2019	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Associate Professor Ayushman Goswami, Professor
56.	Maharashtra	Lonawala 19-23 December, 2019	Faruq Ansari, Professor V.P. Singh, Professor	Sukhvinder, Associate Professor Laxmi Dhar Behra, Professor Elizabeth Gangmai, Assistant Professor
57.	Maharashtra	Lonawala 19-23 December, 2019	S.V. Sharma, Professor Sharad Sinha, Professor	Sarbari Banerjee, Assistant Professor Shashi Prabha, Professor Ramesh Kumar, Associate Professor
58.	Maharashtra	Lonawala 19-23 December, 2019	Anjum Sibia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
59.	Odisha	Bhubaneswar 21-25 December, 2019	Y. Sreekanth, Principal, RIE Mysuru Manjula Rao, Professor	P.D. Subhash, Associate Professor Kalpana Venugopal, Professor T.V. Somashekar, Assistant Professor
60.	Chhattisgarh	Raipur 04-08 January, 2020	Anjum Sibia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
61.	Chhattisgarh	Raipur 04-08 January, 2020	S.V. Sharma, Professor Sharad Sinha, Professor	Sarbari Banerjee, Assistant Professor Shashi Prabha, Professor Ramesh Kumar, Associate Professor



Annual Report 2019-2020



62.	Maharashtra	Pune 03-07 January, 2020	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor Jitendra Patidar, Assistant Professor
63.	Maharashtra	Lonawala 09-12 January, 2020	Anup Rajput, Professor Aparna Pandey, Professor	Ram Babu Pareek, Associate Professor Ayushman Goswami, Professor
64.	Arunachal Pradesh	06-10 January, 2020	Amrendra Behera, Professor Shatrupa Palit, Associate Professor	Tulika Dey, Assistant Professor Arnab Sen, Assistant Professor R.R. Koireng, Associate Professor
65.	Jharkhand	Ranchi 9-13 January, 2020	Suniti Sanwal, Professor Mona Yadav, Professor	K. Vijayan, Assistant Professor Ashita Raveendran, Associate Professor
66.	Uttar Pradesh	Meerut 9-13 January, 2020	Saroj Yadav, Professor Anupam Ahuja, Professor	R. Meghanathan, Professor Romila Soni, Associate Professor Jitendra Patidar, Assistant Professor
67.	Uttar Pradesh	Lucknow 16-20 January, 2020	Anjum Sibbia, Professor Indrani Bhaduri, Professor	Neelkanth Kumar, Assistant Professor Patanjali Sharma, Assistant Professor
68.	Jharkhand	Ranchi 16-20 January, 2020	Faruq Ansari, Professor V.P. Singh, Professor	Sukhvinder, Associate Professor Laxmi Dhar Behra, Professor Ms Elizabeth Gangmai, Assistant Professor

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Online Course in Teaching of Science at Upper Primary Stage

An online course for in-service teachers teaching science at upper primary stage has been developed with the aim to empower the large number of in-service teachers strengthening of their content as well as pedagogic knowledge. A MOOC platform (<http://www.ncertx.in>) using the 'Open edX' has been setup. The four quadrants highlighted in SWAYAM has been fully incorporated in this course in an integrated manner. During the year 2019–20, around 600 in-service teachers across the country have successfully completed the course.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Training Programme in Indian Sign Language

A training programme for public dealing staff of the NCERT in Indian Sign Language was organised on 30 May, 2019 in compliance with the instruction from the Ministry of Social Justice and Empowerment and the Department of School Education and Literacy, MHRD. The objectives of the training programme were to sensitise the Council staff on deafness, Indian Sign Language (ISL), Myths and Misconceptions about Sign Language and related provisions of RPWD Act, 2016; to orient them about the basic communication and everyday expressions in ISL and to make them aware about the education-related terminologies and official terminologies in ISL. The theoretical and practical presentations by the experts includes deaf awareness and introduction of ISL, Myths and conceptions about ISL, RPwD Act, Sign language as a mode of education, basic communication and everyday expressions in ISL, educational and official terminologies in ISL.

Sensitisation Programme on Special Needs of Students of Eklavya Model Residential Schools (EMRSs) in Scheduled Tribe Concentrated Blocks

Another training programme for Teachers and Wardens on Special Needs of Students of Eklavya Model Residential Schools (EMRSs) in Scheduled Tribe concentrated block were organised to sensitise the teachers and wardens on special needs of students of EMRSs situated in STs concentrated blocks of Madhya Pradesh and Tripura. Need Assessment for the programme was conducted through a questionnaire, focus group discussions and interactions with school functionaries by visiting EMRSs and the issues and challenges related to the implementation of inclusive education programme in EMRSs were identified. The NISHTHA training package was used during three days programme conducted at Agartala, Tripura from December 26 to 28, 2019 in EMRS, Bhopal and from 18 to 20 January, 2020.

Roll-out Workshop on UDL Barkhaa: A Reading Series for All

Under PAB programme, UDL *Barkhaa*: A Reading Series for All, three roll-out workshops were conducted at NIE on 29–30 January, 2020, 10–11 February, 2020 and 18–19 February, 2020.



Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Training Programme for Public Dealing Staff of the NCERT in Indian Sign Language	NIE, New Delhi 30 May, 2019
2.	Sensitisation Programme for Teachers and Wardens on Special Needs of Students of Eklavya Model Residential Schools (EMRSs) in Scheduled Tribe Concentrated Blocks	EMRS, Bhopal 26–28 December, 2019 Agartala, Tripura 18–20 January, 2020
3.	Roll out Workshop on UDL <i>Barkhaa: A Reading Series for All</i>	NIE, New Delhi 29–30 January, 2020 10–11 February, 2020 18–19 February, 2020

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION***Diploma Course in Guidance and Counselling (Blended Mode)***

This diploma course aims to train teachers, teacher-educators, educational and a guidance personnel to work as teacher counselors in schools or related settings. The Diploma Course in Guidance and Counselling for the 2019 session began in January 2019. The first phase of distance learning comprised of monthly tutorials, completion of assignments and development of portfolios. The second phase, i.e., three months contact programme involved intensive and supervised school practice during this period. 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 44 trainees by the department.

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

Two five-day training 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



Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Diploma Course in Guidance and Counseling (Blended Mode) 2019	NIE, New Delhi 1 January, 2019–31 December, 2019
2.	Capacity Building of Teachers in Guidance Working in SC, ST Concentrated Areas	NERIE, Umiam (Meghalaya) 14–18 October, 2019 Hurda, Bhilwara, Rajasthan 10–14 February, 2020

DEPARTMENT OF TEACHER EDUCATION

Capacity Building of School Heads for Implementing Swachh Vidyalaya Abhiyan (SVA)

The SVA is an initiative taken by the MHRD in 2014 to ensure that all schools in India have access to separate functional toilets for both boys and girls and ensuring every school in India is well equipped with sanitation, drinking water and hygiene facilities. If sanitation facilities are lacking, then schools become very risky places where infectious diseases are transmitted. A good understanding is needed by teachers on improving school WASH programmes. Thus, training of school heads is the key element for effective hygiene education in the school. Training programmes were organised for heads of elementary schools of Rajasthan, Meghalaya, Odisha, Tripura. Some of the objectives of the training were to enable the heads of schools in developing better infrastructure and maintenance for attaining cleanliness and hygiene, to demonstrate the use of simple technologies for practicing sanitation and hygiene. The programme design includes a presentation by each school head on the implementation modalities and difficulties faced by the school and development of a plan of action for making their school WASH friendly.

Professional Development Course-Orientation-cum-Refresher Course for the NCERT Faculty

The 7th Orientation-cum-Refresher Course for faculty members of NCERT was organised from 12 September, 2019 to 01 October, 2019. Faculty members for different constituent units of NCERT participated in the programme. The focus of the programme was participatory learning and reflection on a variety of professional issues in Career Advancement Scheme for professional growth as well as to equip the faculty with knowledge, skills and proficiency desired for realising institutional objectives. The themes such as Learning Outcomes, School Based Assessment, Early Childhood Care and Education, Health and Well Being, Curriculum Research and Development, Educational Research Methodology both qualitative and quantitative, ICT, etc., were discussed during the programme.

Professional Development Course for the Faculty of SCERTs or SIEs and DIETs

Three weeks' Professional Development Course for SCERTs or SIEs and DIETs faculty was organised at NIE, New Delhi from 16 September to 04 October, 2019. A total number of 32 teacher-educators from different DIETs representing



States of Madhya Pradesh, Uttar Pradesh, Rajasthan, Uttarakhand and Gujarat participated in the programme. Major themes covered during the programme included: Issues related to teacher education; Issues related to school education; Issues related to Pedagogy— Constructivist Approach: Constructivist Pedagogy with examples; Improving Managerial Skill— Communication Skills; Hands-on Experience in Integration of ICT in Teaching-learning Process; Other Important Areas— *Samagra Shiksha*; Relevance of Universal Human Values and Peace Based Education; National Achievement Survey (Utilisation of Data); Social and National Concerns in School Curriculum; Syllabus and Textbook Analysis; Issues and Concerns related to Adolescent students; Art Integrated Learning and Action Research in Education.



Participant of the Professional Development Course for SCERTs, SIEs and DIETs Faculty receiving the certificate

Integrated Multidisciplinary Professional Advancement Course for Teachers (IMPACT)

The Government of Jammu and Kashmir (UT) approached NCERT for the training of their untrained teachers through a course to address the gaps in the teaching skills of the teachers not having professional degree, but having teaching experience of many years. Accepting the request of Jammu and Kashmir, the NCERT team had initiated the process of developing the unique course for the 37,000 untrained elementary stage teachers. As it was required to have an understanding of the needs of these teachers before designing the course, NCERT team visited Srinagar in the month of January, 2020 and interacted with 150 teachers and teacher-educators of Jammu and Kashmir. The needs emerged during the interaction with the teachers were: language proficiency, skills to handle multi-grade situations, pedagogies of subject areas, assessment in the class and schools engaging children in activities and challenging task, etc. Based on need assessment of untrained teachers in Jammu and Kashmir, a short course titled 'Integrated Multidisciplinary Professional Advancement Course for Teachers (IMPACT)' with comprehensive features was designed for three phases face-to-face mode (for five days), field work (twenty-one days) and reflection and assessment (three days). It was conducted as a certificate course of one-month duration. An IMPACT package containing of 10 modules on themes— Understanding Learner, Multi-grade Teaching-learning, School Based Assessment, Pre-school Education, Foundational Literacy and Numeracy, Pedagogy of Environmental Studies, Pedagogy of Languages, Pedagogy of Science, Pedagogy of Mathematics and Pedagogy of Social Sciences were developed. These modules were prepared involving 16 mentor resource persons of Jammu and Kashmir. A five-day capacity building programme was conducted from February 13 to 17, 2020 for around 250 resource persons of the Jammu and Kashmir who had to further train 37000 teachers across the UT.



Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Capacity Building of Heads of Schools for Implementing <i>Swachh Vidyalaya Abhiyan</i> (SVA)	<ul style="list-style-type: none"> Odisha School Education Programme Authority, Bhubaneswar 5–9 August, 2019 Directorate of Educational Research and Training, Meghalaya 2–6 September, 2019 State Council of Educational Research and Training, Tripura 21–25 October, 2019 State Council of Educational Research and Training, Udaipur 13–17 January, 2020
2.	Professional Development Course Orientation-cum-Refresher Course for NCERT Faculty	NIE, New Delhi 12 September–1 October, 2019
3.	Professional Development Course for the Faculty of SCERTs/SIEs and DIETs	NIE, New Delhi 16 September–4 October, 2019
4.	Integrated Multidisciplinary Professional Advancement Course for Teachers (IMPACT)	Jammu and Kashmir 13–17 February, 2020

DEPARTMENT OF GENDER STUDIES***Capacity Building of Secondary Teachers from the Aspirational Districts of Western Region on Gender Issues in Education***

Training constitutes an important component of the department's activities for promoting girls' education and addressing gender concerns in education. The training programmes aimed to sensitise teachers on gender concerns in education, make them aware of schemes and programmes for the education and empowerment of girls and equip them to analyse teaching-learning material from a gender perspective, build capacity for undertaking projects on issues related to gender in their districts and generate awareness about vocational skills for economic empowerment of girls. The first phase of the programme



Resource person interacting with the participants during the Capacity Building Programme for Secondary Teachers from the Aspirational Districts of Western Region on Gender Issues in Education



was conducted for the States of Gujarat, Maharashtra and Rajasthan in Delhi from 8 to 12 July, 2019. The participants prepared action plan related to gender concerns to be carried out in their areas. In phase II, a follow-up workshop was conducted at NIE, New Delhi in which presentations of the field works were made.

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 Aspirational Districts of Western Region on Gender Issues in Education	NIE, New Delhi 8–12 July, 2019
2.	Follow-up Workshop on Capacity Building of Secondary Teachers to act as Master Trainers from Aspirational Districts of Western Region on Gender Issues in Education	NIE, New Delhi 3–6 February, 2020

LIBRARY AND DOCUMENTATION DIVISION

Continuous Professional Development Programmes for the Library Staff of NCERT and its Constituent Libraries

The objectives of the programme was to create awareness about latest practices of ICT application in the libraries, to provide a platform for library professionals to exchange comprehensive implementation of ICT in libraries, to identify new innovative steps to be taken by NCERT and its constituent libraries in the context of ICT and to bring the uniformity at all levels of development.

The programme was organised at NIE, New Delhi on 27–31 January, 2020 in which participants from all the RIEs, DMS, CIET, PSSCIVE and LDD participated. The topics such as Open Source Software and its application in the present scenario, policy for subscription of e-Resources in NCERT and its constituent libraries, Introduction to KOHA Library Management Software, Installation of KOHA Hands-on Experience, Acquisition Module, Cataloguing Module and Practices, Patrons entry Practices and Circulation Module, System Settings IP Address and Other KOHA administrative settings, Customisation of KOHA, Serial Management with KOHA, Tools, Reports and other Searching Techniques, Google Librarianship, Remote Access Technologies and its model for NCERT and its constituent libraries and Personality Development of Library Professionals were covered in the programme.

Details of Training/Orientation/Capacity Building Programmes Organised

Title of the Programme	Venue and Date
Continuous Professional Development Programmes for the Library Staff of NCERT and its Constituent Libraries	NIE, New Delhi 27–31 January, 2020

INTERNATIONAL RELATIONS DIVISION

A two-week 'Customised Training of Teachers Teaching at Secondary and Secondary Specialised High Schools of Uzbekistan on STEAM (Science, Technology, Engineering, Art and Mathematics) and IFP (International Foundation Programme), sponsored by the Ministry of External Affairs (GoI) was



organised from 16 to 30 September, 2019 for 19 teachers from the Academic Lyceum of Uzbek State World Languages University (ALUSWLU), Uzbekistan.

Details of Training/Orientation/Capacity Building Programmes Organised

Title of the Programme	Venue and Date
Customised Training of Teachers Teaching at Secondary and Secondary Specialised High Schools of Uzbekistan on STEAM (Science, Technology, Engineering, Art and Mathematics) and IFP (International Foundation Programme)	NIE, New Delhi and Regional Institute of Education, Bhopal 16–30 September, 2019

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Online Certificate Course on Action Research in Education

In the ninth cycle of the course (<https://ictcurriculum.gov.in>) a total of 167 candidates were enrolled out of 312 applicants. The course modules were made available to them. Five online synchronous meetings were conducted to resolve the queries of participants. Access to modules were opened for the participants and assignments were received and feedback was provided to the participants. Finally based on online end test and overall performance and participation grading was assigned to all the participants.

Continuous Professional Development of NCERT Faculty on ICT in Education

A tentative schedule for conducting theme-wise programmes (Cyber Safety and Security, OERs, FOSS, AI, AR and VR, MOOCs, etc.) has been prepared. Two programmes, i.e., orientation on Technical Aspects of NISHTHA and Interactive Presentation using zee lings were conducted for NCERT faculty.

PANDIT SUNDERLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

The institute organised 45 training programmes for teachers and key functionaries of States and UTs which comes under three categories.

Orientation Programmes

Nine orientation programmes on implementation of vocational education in schools for the key functionaries of various States or UTs. A total of 425 key functionaries of different States and UTs participated in these programmes. During these programmes, the participants were acquainted with various aspects of the implementation of vocationalisation of secondary and higher secondary education under *Samagra Shiksha* (Integrated Scheme for School Education). They were acquainted with the roles and functions of the Principals in the effective implementation of the vocational education. Presentations were made on the role and functions of the various departments and agencies, including National Skill Development Corporation, National Skill Development Agency, State Directorate of School Education, State Education Boards and Vocational Training Providers in the implementation of the skill development schemes, including vocational education in schools under *Samagra Shiksha*. The participants were apprised with the terminologies and acronyms used for the implementation of vocationalisation of education under *Samagra Shiksha*



and the National Skill Qualification Framework (NSQF). Various aspects of pre-vocational education from Classes VI to VIII and occupation-based vocational subjects offered from Classes IX to XII were discussed during the sessions. The structure and implementation of learning outcomes based vocational curriculum and the various modules in the curriculum of employability skills were also discussed. Sessions were also conducted on domains of learning, vocational pedagogy, teaching-learning, e-Learning and skill assessment and evaluation of students.

Sector-wise presentations were made on the curriculum and courseware developed by the institute in the area of Agriculture, Apparel, Made ups and Home Furnishing, Power, Construction, Retail, Tourism and Hospitality and Healthcare sectors. Presentations were also made on Student Support System, Career and Vocational Guidance, Publicity of Vocational Courses, On-the-Job Training, Vertical Mobility, Career *Melas*, Apprenticeship training by the faculty of the Institute.

Group works were done by the participants for developing action plans in achieving excellence in implementation of vocational education in schools. The action plans included activities, such as celebration of World Youth Skills Day organisation of Career Exhibition, development of short video films, organisation of seminars for popularisation of vocational courses, publication of articles and news on vocational education in school magazine or bulletin, promotion of entrepreneurial activities in school, inviting experts for presentations and training of teachers for upgradation of competencies.

Capacity Building Programmes for Developing Master Trainers on Vocational Pedagogy

Ten capacity building programmes were organised for developing master trainers on Vocational Pedagogy for teachers of Haryana, Telangana, Goa, Madhya Pradesh, Jammu and Kashmir, Tamil Nadu, Rajasthan, North-Eastern States, Odisha and West Bengal states. These programmes were organised to develop pedagogical skills for improving teaching-learning in schools and to equip master trainers with skills to organise activity-based learning using various tools and techniques. The modules used for the training of teachers include: National Skill Qualification Framework and Vocationalisation of School Education, Learning Outcome-based Curriculum and Vocational Pedagogy, Instructional Methods in Vocational Education, Instructional Media for Vocational Education and Training and Assessment, Evaluation and Certification. All the sessions ended with activities and home assignments organised or assigned as per the recommendation in the curriculum of vocational pedagogy.

Teachers Training on Different Vocational Subjects (Job Roles) Implemented under Samagra Shiksha

Nineteen teachers training programmes on different vocational subjects (job roles) implemented under *Samagra Shiksha* for the teachers of the implementing states were organised. The training programmes were organised for the job roles on Assistant Beauty Therapist, Paddy Farmer, Animal Health Worker, Dairy Farmer, Store Operations Assistant, Sales Associate, Automobile Technician, Biometric Data Entry Operator, Installation Technician Computing and Peripherals, Optical Fiber Splicer, General Duty Assistant, Sewing Machine Operator and Textile Designing. The vocational teachers from different



sectors 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 or 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.

A training programme for Engineering and Technology-based vocational teachers in developing teaching-learning and assessment skills for Karnataka State and a training programme for the soft skills development of staff of the institute was also organised.

Diploma in Vocational Education and Training (DVET)

One-year Diploma in Vocational Education and Training Programme (Contact Mode) was launched in the month of April 2019, aiming to prepare a teacher specifically for vocational subjects. The institute is planning to launch it on distance mode from July 2020, for which the institute has developed the document titled Diploma in Vocational Education and Training (Distance Mode) Programme Guide. The programme has four trimesters. Trimester one covers vocational education and training system, curriculum development, implementation and evaluation, instructional design and development; Trimester two covers assessment and evaluation, vocational guidance and counseling, employability skills development, research in vocational education and training; The third trimester covers ICT application in vocational education and training and specialisation in one sector as an elective. The specific sectors provided for choice are agriculture, IT/ITeS, health care, retail, automotive and apparel, made-ups and home furnishing; and the fourth trimester has project work, school and industry-based training. Directorate of Secondary Education, Tripura, deputed three teachers for the programme at PSSCIVE, Bhopal. All three teachers have successfully completed all the requirements of the diploma programme with specialisation in retail sector and were relieved in March 2020 with the certificate of the one-year diploma.

Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Orientation of Additional District Project Coordinators (ADPCs) of Rajasthan State on Implementation of Vocational Education in Secondary and Higher Secondary Schools Under NSQF	PSSCIVE, Bhopal 9–11 July, 2019
2.	Orientation Programme of Key Functionaries on Implementation of Vocational Education in Schools of Uttar Pradesh and Uttarakhand	PSSCIVE, Bhopal 7–9 August, 2019
3.	Teachers Training Programme on Paddy Farmer in Agriculture Sector	PSSCIVE, Bhopal 19–23 August, 2019
4.	Teacher Training Programme on Automobile Technology Implemented under <i>Samagra Shiksha</i>	PSSCIVE, Bhopal 26 to 30 August, 2019



5.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools of Andhra Pradesh	PSSCIVE, Bhopal 27–29 August, 2019
6.	Teachers Training on Store Operations Assistant and Sales Associate in Organised Retail Sector for Southern Region	PSSCIVE, Bhopal 2–6 September, 2019
7.	Teachers Training on Store Operations Assistant and Sales Associate in organised Retail Sector for Western Region	PSSCIVE, Bhopal 16–20 September, 2019
8.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy	PSSCIVE, Bhopal 16–20 September, 2019
9.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools of Bihar and Jharkhand	PSSCIVE, Bhopal 24–26 September, 2019
10.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools of Goa and Kerala	PSSCIVE, Bhopal 16–18 September, 2019
11.	Training for Vocational Teachers of Textile Designing Vocational Course	PSSCIVE, Bhopal 16–18 September, 2019
12.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools of West Bengal	Don Bosco Institute, Kolkata 4–26 September, 2019
13.	Orientation Programme on Implementation of Innovative Vocational Education and Training Programme in Model Schools for Key Functionaries and Vocational Teachers	PSSCIVE, Bhopal 24–27 September, 2019
14.	Teachers Training Programme on Store Operations Assistant and Sales Associate in organised Retail Sector	Seminar Hall, SCERT Haryana, Gurgaon 14–18 October, 2019
15.	Training for vocational teachers in the area of Apparel Made-ups and Home Furnishing sector job role ‘Sewing Machine Operator’	PSSCIVE, Bhopal 4 to 8 November, 2019
16.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy	PSSCIVE, Bhopal 4–8 November, 2019
17.	Teachers training on Store Operations Assistant and Sales Associate in Organised Retail sector for Eastern Region	PSSCIVE, Bhopal 4 to 8 November, 2019
18.	Teachers Training on Vocational Subjects Optical Fiber Technician implemented under <i>Samagra Shiksha</i>	Amal Jyothi College of Engineering, Kanjirapally, Kottayam 18–22 November, 2019
19.	Teachers Training on Vocational Subjects (Job Role: Domestic Biometric Data Operator) implemented under <i>Samagra Shiksha</i>	Amal Jyothi College of Engineering, Kanjirapalli, Kottayam 18–22 November, 2019
20.	Training of Vocational Teachers or Trainers on Green TVET	PSSCIVE, Bhopal 27–29 November, 2019



21.	Training of Engineering and Technology based Vocational Teachers in Developing Teaching-learning and Assessment Skills for Karnataka State	SCERT, Bengaluru 18–22 November, 2019
22.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy for Goa, Telangana and Kerala States	PSSCIVE, Bhopal 18–22 November, 2019
23.	Orientation Programme for Officials of Madhya Pradesh State on Implementation of VEP in Secondary and Higher Secondary Schools	PSSCIVE, Bhopal 19–20 November, and 22 November, 2019
24.	Teachers Training on Store Operations Assistant and Sales Associate in Organised Retail Sector for North-Eastern Region	NERIE, Shillong 25–29 November, 2019
25.	Capacity Building of Vocational Co-ordinators of Madhya Pradesh, Goa and Telangana	PSSCIVE, Bhopal 2–6 December, 2019
26.	Orientation Programme for Key Functionaries on Implementation of Vocational Education in Schools of Assam and Arunachal Pradesh	PSSCIVE, Bhopal 4–6 December, 2019
27.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy for Delhi, Bihar and Jharkhand	PSSCIVE, Bhopal 9–13 December, 2019
28.	Capacity Building Programme for Developing Master Trainers on Vocational pedagogy for West Bengal and Rajasthan states	PSSCIVE, Bhopal 9–13 December, 2019
29.	Training on Vocational Pedagogy and Skill Assessment for Vocational Teachers of Goa, Telangana, Kerala and Madhya Pradesh	PSSCIVE, Bhopal 9–13 December, 2019
30.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy	PSSCIVE, Bhopal 16–20 December, 2019
31.	Teacher Training for the Job Role of Assistant Beauty Therapist in Beauty and Wellness Sector	PSSCIVE, Bhopal 16–20 December, 2019
32.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy	PSSCIVE, Bhopal 13–17 January, 2020
33.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy for Andhra Pradesh, Karnataka and Tamil Nadu States	PSSCIVE, Bhopal 20–24 January, 2020
34.	Capacity Building Programme for Developing Master Trainers on Vocational Pedagogy for Tripura, Assam, Arunachal Pradesh, Mizoram, Meghalaya, Nagaland, Sikkim, Andhra Pradesh, Delhi, Punjab and Madhya Pradesh	PSSCIVE, Bhopal 10–14 February, 2020



35.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools of Karnataka and Dadar and Nagar Haveli	PSSCIVE, Bhopal 11–13 February, 2020
36.	Orientation of Key Functionaries on Implementation of Vocational Education in Schools	PSSCIVE, Bhopal 10–13 February, 2020
37.	Teachers Training on the Job Role of ‘Dairy Worker in Agriculture Sector’	PSSCIVE, Bhopal 9–13 February, 2020
38.	Training on Development of Soft Skills for Employees of PSSCIVE	PSSCIVE, Bhopal 12–13 March, 2020

REGIONAL INSTITUTE OF EDUCATION, AJMER

The training programme aimed to orient and enable KRPs of DIETs in the area of Action Research to enable them to identify problem and undertake problem related to action research at elementary level. KRP’s were also trained on skills required to prepare academic report of action research undertaken.

Diploma Course in Guidance and Counselling (Self Finance, Blended Mode)

The diploma course in guidance and counselling was addressed to meet the requirements of trained personnel in guidance and counselling in schools and teacher training institutions. The NCERT has been offering nine-month Post-graduate Diploma Course in Guidance and Counselling through its constitute units. In the session 2019–2020, total 50 candidates got admitted for diploma course out of which 47 successfully completed and remaining three candidates will continue the same course in the session 2020–2021.

Title of the Programme	Venue and Dates
Capacity Building Programme on Action Research for Teachers and Teacher Educators belonging to Minority Dominated Areas for the States of Rajasthan and Himachal Pradesh.	RIE, Ajmer 14–20 November, 2019 and 02–04 March, 2020

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Training programmes were conducted by the Regional Institute of Education, Bhopal in the areas of teacher education, global citizenship education for 21st Century, research methodology, guidance and counselling, school library, a theatre use in education, etc.

Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Training of Librarian working in Higher Secondary Schools of GOA on use of Advance Software in Library	SCERT, Goa
2.	Capacity Building for Librarians of DIETs of Gujarat	SCERT, Gujarat



3.	Theatre Workshop and Performance for Pre-service Teacher Trainees of RIE, Bhopal Theatre Workshop was conducted in three phases: <ul style="list-style-type: none"> • In the First phase, workshop was held for B.A.B.Ed. V Semester students in which <i>Charandas Chor</i> play was performed. • In the Second phase, workshop was held for B.Sc.B.Ed. VI semester students in which 'Gandhi' play was performed. • In the Third phase, workshop was held for B.Ed.M.Ed. II Sem from 4 to 13 March 2020 <i>Aadhin Nama</i> play was performed. 	RIE, Bhopal 8–17 October, 2019 19–30 January, 2020 4–13 March, 2020
4.	Training Programme on Research Methodology for Teacher Educators	RIE, Bhopal 12–16 March, 2020
5.	Diploma Course in Guidance and Counseling (Through Distance/Online and Face-to-Face)	RIE, Bhopal 1 April, 2019– 31 March, 2020

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

Diploma Course in Guidance and Counselling (DCGC)

The NCERT and its constituent units has been offering Diploma Course in Guidance and Counselling at RIEs and NIE, New Delhi with an objective of bringing qualitative changes in school education and teacher education. In this context, to make the programme accessible to large number of candidates especially in-service teachers without interfering their teaching routine, the course is designed with distance, online and face-to-face mode. The duration is one year, beginning from January and ending in December. For the session 2019–2020 as usual, the programme was carried out in three phases, i.e., online (January–June 2019), face-to-face (July–September 2019) and internship (October–December 2019). Thirty-one candidates were selected for the session of 2019. The initiation of session started with orientation of the trainers followed by the online phase wherein assignments based on the modules and questions prepared from the NIE, NCERT were given to students and the same was answered by students and deposited in hard copies at the institute. During the online phase 2, tutorials were organised for giving guidance and feedback on their assignments and as a preparation for the second phase. The face-to-face contact classes, practicum classes and school attachment programmes were conducted as designed. The trainees rigorously practiced all the skills learnt in the classroom of the cooperating schools, for which reports were prepared and submitted. The internship phase was carried out as per the choice of institution or organisation given by the students for which proposals were prepared under the guidance of tutors and presentations were conducted for finalisation of the internship proposal. The internship reports were submitted in the month of December 2019.



Capacity Building Programme on Inclusive Education for Secondary Level Maulvis of Odisha

The main objective of the programme was to empower secondary level *maulvi* of *Madrasa* at Odisha on inclusive education for further implementation in their context. The methodology followed during the programme was experiential mode wherein participation, involvement, discussion, brainstorming, and group work were followed. A three-day workshop for the finalisation of the modules for the training programme was conducted from 11 to 13 September, 2019 followed by a five-day training programme organised at RIE, Bhubaneswar from 3 to 7 February, 2020. During the sessions, the modules developed were transacted and feedback was taken.

S.No.	Title of the Programme	Venue and Dates
1.	Capacity Building of PGTs in History for Eastern Region	Port Blair 25–29 November, 2019
2.	Capacity Building Programme for KRPs of OAVs (Secondary in Science)	RIE, Bhubaneswar 16–20 December, 2019
3.	Capacity Building Programme on Inclusive Education for Secondary Level Maulvis of Madrasas at Odisha	RIE, Bhubaneswar 03–07 February, 2020
4.	Capacity Building for KRPs of Bihar at Higher Secondary Level in Mathematics	RIE, Bhubaneswar 20–24 January, 2020
5.	Self-Financed Course on Blended Mode	RIE, Bhubaneswar January–December, 2019

REGIONAL INSTITUTE OF EDUCATION, MYSURU

RIE, Mysuru conducted capacity building programmes for 255 teachers in Hunsur Block in four different areas viz., Art Integrated learning, School-based Assessment, Use of Mathematics Kit and Community Mobilisation.



Participants during the Capacity Building Programme on Art Integrated Learning



Details of Training/Orientation/Capacity Building Programmes Organised

S.No.	Title of the Programme	Venue and Dates
1.	Capacity Building Programme on Art Integrated Learning	RIE, Mysuru 22–26 July, 2019
2.	Capacity Building Programme on School-based Assessment	RIE, Mysuru 21–25 October, 2019
3.	Capacity Building Programme on use of Mathematics kits	RIE, Mysuru 8–9 January, 2020
4.	Capacity Building Programme on Community Mobilisation	RIE, Mysuru 17 February, 2020

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

Training of Key Resource Persons on Research Methodology for the States of Nagaland, Manipur and Assam

The programme was organised for the DIET faculty from Nagaland, Manipur and Assam at NERIE, Umiam from the February 3 to 7, 2020. The sessions covered the topics: the meaning, nature, types and steps of educational research, identification and formulation of research problems, review of literature, variables, writing of titles, objectives, hypothesis, quantitative research, qualitative research, mixed research, action research, writing research proposals, report writing, etc. The participants developed individual and group research proposals during the programme.

Training of Master Trainers on Question Paper Setting in Language, Science and Social Science at Secondary Level for the State of Mizoram, Manipur and Assam

The programme was held for the KRPs from Manipur and Assam at NERIE, Umiam from February 17 to 21, 2020. The training programme covered the topics— examination reforms, blue print for question paper setting, item sheets, design of question paper setting, development of subject-specific question papers, etc. Each participant developed a question paper each in their subject areas and all the question papers were discussed and improved upon.

Training of Master Trainers (CRC, BRC and Head Teachers) of Aspirational Districts of NE States on Learning Outcome (Language and Social Science)

The programme was held at NERIE, Umiam from January 20 to 24, 2020. The programme was attended by 11 Master Trainers from Mizoram and Tripura. Learning outcomes in English and other Social Science subjects were discussed in the training programme.

Capacity Building of KRPs of Sikkim in Guidance and Counselling

The programme was conducted for DIET Faculty members and Head of the schools at SCERT, Sikkim from 20 to 24 January, 2020. The topics covered in the programme were— identifying the problems in children, guidance for human development and adjustment, qualities of a counsellor, approaches to counselling, basic counselling skills, career information in guidance and counselling, guidance for human development and adjustment, stress management, etc.



Training on Early Childhood Education

The programme was conducted at NERIE, Umiam from 16 to 20, March 2020. Issues related to Early Childhood Education, minimum specification of ECE, materials and methods in ECE, Joyful learning, pre and early mathematics, language, growth and development, early EVS learning and inculcating values in children. There was also a topic on Educational thinkers and Early Childhood Education.

Effective Teaching-learning in English at Higher Secondary Level for the State of Manipur

The five-day training programme was organised for the Key Resource Persons on effective teaching-learning in English at higher secondary level for the State of Manipur at SCERT, Imphal from October 21 to 25, 2019. The topics covered in the programme were language skills, teaching of vocabulary, grammar in language learning, transacting the texts in the teaching of prose and poetry.

Training for the PGT'S in English for the State of Sikkim

A training programme was conducted at SCERT, Gangtok, Sikkim from March 2 to 6, 2020 in which methodology of teaching language, grammar, vocabulary, evaluation and testing were covered.

Details of Training/Orientation/Capacity Building Programmes Organised

S.No	Title of the Programme	Venue and Dates
1.	Training of Teachers of Bhoirymbong Block on Adolescent Education	NERIE, Umiam 19–21 November, 2019
2.	Training of Master Trainers on Teaching of Tribal/Minority Languages of the State of Manipur	Directorate of School Education(S), Imphal 28 January–1 Feb, 2020
3.a.	Training of Master Trainers (CRC, BRC and Head Teachers) of Aspirational Districts of NE States on Learning Outcome (Language and Social Science)	NERIE, Umiam 21–24 January, 2020,
3.b.	Capacity Building of KRPs of Sikkim in Guidance and Counseling	SCERT, Sikkim 20–24 January, 2020
4.	Training of Master Trainers on Question Paper Setting in Language Science and Social Science at Secondary Level for the States of Mizoram, Manipur and Assam.	NERIE, Umiam 17–21 February, 2020
5.	Training of Key Resource Persons on Research Methodology for the States of Nagaland, Manipur and Assam	NERIE, Umiam 3–7 February, 2020
6.	Training on ECE (shortened to 5 day training due to COVID-19 regulatory orders)	NERIE, Umiam 16–20 March, 2020
7.	Training of KRPs in Effective Teaching Learning in English at Higher Secondary Level for the State of Manipur	SCERT, Manipur 21–25 October, 2019
8.	Training for PGTs in English for the State of Sikkim	SCERT, Sikkim 2–6 March, 2020
9.	Training for the KRPs on the Pedagogy of English at the Secondary Level for the State of Tripura	SCERT, Agartala 10–14 February, 2020



PRE-SERVICE COURSES IN RIEs

Course-wise Students' Enrolment in the RIEs during the Session 2019-20

S.No.	Name of the Course	Ajmer	Bhopal	Bhubaneswar	Mysuru	Umiam (Meghalaya)
1.	B.Sc. B.Ed.					
	I Year	98	73	104	45	
	II Year	90	71	98	50	
	III Year	89	64	95	39	
	IV Year	86	66	101	41	
2.	B.Ed. (Secondary)					
	I Year	91	–	100	21	48
	II Year	84	74	94	30	46
3.	B.A. B.Ed.					
	I Year	46	39	50	23	
	II Year	43	37	48	25	
	III Year	40	37	48	24	
	IV Year	42	37	48	25	
4.	M.Ed. (El.Ed.)					
	I Year	22	18	33		
	II Year	26	23	30		
	M.Ed. (Secondary)					
	I Year	–			06	
	II Year	–			04	
5.	DCGC	45	45	53		20
6.	M.Sc. Ed.					
	I Year	–			24	
	II Year	–			26	
	III Year				24	
	IV Year	–			23	
	V Year	–			19	
	VI Year	–			22	
7.	B.Ed.					
	I Year	–				
	II Year	–				
8.	M. Phil			6		
9.	M.Sc. (LS)					
	II Year	–				
10.	3 Year B.Ed.,M.Ed. (New Course)					
	I Year	–	48			
	II Year	–	41			
	III Year	–	–			
Total						



RIE Students' Performance in University Examination, 2019-20

S.No.	Course	Ajmer		Bhopal		Bhubaneswar		Mysore		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	-	-	74/68	91	101/101	100.00	81/78	96	-	-
	II Year Appeared Passed	-	-	65/64	98	97/97	100.00	78/73	94	-	-
	III Year Appeared Passed	-	-	66/66	100	95/95	100.00	75/71	95	-	-
	IV Year Appeared Passed	-	-	74/65	82	Result Awaited	-	72/69	96	-	-
2.	B.Ed.										
	I Year Appeared Passed	-	-	-	-	100/100	100.00	50/49	98	-	-
	II Year Appeared Passed	-	-	73/60	82	Result awaited	-	49/47	96	46/46	100



3.	M.Ed.(El.Ed.)										
	I Year Appeared Passed	-	-	21/21	32/32	100.00	-	-	-	-	-
	II Year Appeared Passed	-	-	24/24	100	Result awaited	-	-	-	-	-
M.Ed. (Sec.) Appeared Passed											
4.	MSc. Ed.										
	I Year Appeared Passed	-	-	-	-	30/28	93.33	10/9	90	-	-
	II Year Appeared Passed	-	-	-	-	26/26	100	10/10	100	-	-
4.	MSc. Ed.										
	I Year Appeared Passed	-	-	-	-	-	-	46/43	94	-	-
	II Year Appeared Passed	-	-	-	-	-	-	45/41	91	-	-
	III Year Appeared Passed	-	-	-	-	-	-	41/41	100	-	-
4.	IV Year Appeared Passed	-	-	-	-	-	-	36/34	94	-	-



Annual Report 2019-2020



	V Year Appeared Passed	-	-	-	-	-	-	-	-	36/34	94	-	-
	VI Year Appeared Passed	-	-	-	-	-	-	-	-	35/34	97	-	-
5.	DCGC Appeared Passed	-	-	45/44	98	22/22	100	38/37	97	-	-	-	-
6.	B.A. B.Ed./B.A.Ed.												
	I Year Appeared Passed	-	-	36/37	94.87	Result awaited	-	40/38	95	-	-	-	-
	II Year Appeared Passed	-	-	37/37	100	Result awaited	-	38/35	92	-	-	-	-
	III Year Appeared Passed	-	-	38/37	97	48/48	100.00	37/34	92	-	-	-	-
	IV Year Appeared Passed	-	-	38/35	89	Result awaited	-	37/34	92	-	-	-	-
7.	M. Phil.												
	I Year Appeared Passed	-	-	-	-	10/9	90	-	-	-	-	-	-
	II Year Appeared Passed	-	-	-	-	10/9	90	-	-	-	-	-	-

3 Year B.Ed., M.Ed. (New Courses)										
8.	I Year Appeared Passed		49/48	97	-	-	-	-	-	-
	II Year Appeared Passed		42/41	97	-	-	-	-	-	-
	III Year Appeared Passed		-	-	-	-	-	-	-	-
9.	DCGC		45/41	98	34/34	100.00	-	-	-	-



Annual Report 2019-2020

6. Extension Activities

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

The extension programmes of the Council include 46th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for children 2019, State Level Science, Mathematics and Environment Exhibitions (SLSMEE) for children, National consultation meet on *Madrassa* functionaries under minority cell activities, celebration of International Mother Language Day, National Library of Educational and Psychological Tests (NLEPT), centre for popularisation of science, national awards for innovative practices and experiments in education for schools and teacher education institutions, NCERT incentive award for Demonstration Multipurpose School (DMS) teachers, information literacy programme, extension lectures of eminent educationists, expression series on eminent personalities, workshop for heads and co-ordinating teachers of co-operating schools for internship 2019–20, working with the community programme of student-teachers of RIEs, organisation of school exposure and multi-cultural placement programme of B.Ed. students and pre-school education in Demonstration Multipurpose School.

The NCERT organised various international and national conferences during the year on Re-imagining Technical and Vocational Education and Training for the Changing World: Perspectives and Practices, In-country Programme on Leadership and Change Management for TVET, on school leadership practices, on Implications of ‘Gandhian Thought’ for School Curriculum and International Conference on Education in the Twenty first Century.

DEPARTMENT OF ELEMENTARY EDUCATION

State-level Consultation Meet-cum-workshop on Pedagogy of Mathematics at Pre-primary and Primary Stage to Improve Achievement of Learning Outcomes

Two state-level consultation meets-cum-workshops for developing understanding on different aspects of school mathematics, keeping in view the improvement in achieving learning outcomes, was conducted for the State of Madhya Pradesh at Ujjain from 28 to 31 January, 2020 and for Maharashtra at Pune from 5 to 8 March 2020. Around 100 participants which included KRPs, SRPs, master

trainers and school teachers were trained in the workshop on the pedagogy of primary mathematics and the use of mathematics learning kit keeping in view of the achievement of learning outcomes. Both the states have been suggested to conduct programmes for classroom teachers on teaching of Mathematics in pre-primary and primary classes as a follow up of these programmes.

DEPARTMENT OF EDUCATION IN LANGUAGES

Celebration of International Mother Language Day

A series of activities included talks and discussions on the importance of mother tongue and ways and means of including mother tongues of learners in school education was organised on the occasion, on 21 February, 2020. Talks by Prathiba Ray, an eminent writer of Odia novels and stories, Sahitya Academy, Jnanpith and Padma Shri Awardee, and R.P. Misra, *Professor*, author and translator were organised. A *nukkad natak* (street play) *Kahawatein* on the importance of languages was also performed by the Group AAHANG. Faculty members and staff of NCERT, teachers and teacher-educators from various institutions and schools, student-teachers from District Institute of Education and Training (DIET), research scholars from universities, etc., participated in the programme.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Centre for Popularisation of Science

For the popularisation of Science, two centres are maintained namely, 'Science Park' and 'Herbal Garden'. Science Park is an open air park in which working models are placed, which provide hands-on experiences to children, teachers, teacher-educators, NGOs and other functionaries concerned with the teaching of Science in schools. This helps in understanding and appreciating certain selected principles of Science. During the year 2019–20, 'Science Park' received visitors from all over the country. Under this extension programme, guidance is also provided to schools and educational planners in developing similar models in their institutions on demand.

46th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2019

The 46th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2019 was organised in collaboration with the Department of School Education, Chhattisgarh and SCERT, Raipur at BTI Ground, Shankar Nagar, Raipur, Chhattisgarh from 15 to 20 October, 2019. It was inaugurated by the Hon'ble *Governor* of Chhattisgarh Smt. Anusuiya Uikey on 15 October, 2019. The inaugural function was also graced by Premsai Singh Tekam, *School Education Minister*, Chhattisgarh, Gaurav Dwivedi, *Principal Secretary*, Government of Chhattisgarh, Hrushikesh Senapaty, *Director*, NCERT, P. Dayanand, *Director*, SCERT, Raipur and other dignitaries of Chhattisgarh Government and NCERT. Main theme of the exhibition was Scientific Solutions for Challenges in Life. A total of 147 exhibits were selected at the NCERT level and invited to participate in JNNSMEE 2019. These were drawn from thirty-two States/UTs and Organisations. The young scientists showcased their innovations to the visitors.





Cultural programme as part of JNNSMEE 2019



Students interacting with the participant on the Science Exhibit during the JNNSMEE 2019

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

State Level Science, Mathematics and Environment Exhibition (SLSMEE) for Children 2019–20 is the first phase of preparation for the Organisation of Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2020. Its objectives are to popularise Science and Mathematics, and to create awareness about environmental issues and concerns; to provide opportunity for children to develop their scientific talent; to provide a forum for children to pursue their natural curiosity, creativity and inventiveness; to stimulate spirit of exploration in developing suitable technology by the application of scientific and mathematical principles to everyday life situations; and to strengthen state level exhibitions in States/UTs. State level exhibitions during 2019–20 were conducted under the main theme ‘Science and Technology for Sustainable Development’. For organising the exhibition, proper guidelines were developed and shared with these States/UTs and also a catalytic grant for organising the State Level Exhibitions in different States/UTs were disbursed. Selected entries from all of these participated in the JNNSMEE 2020.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

National Consultation Meet on Madrasas Functionaries under Minority Cell Activities

The meet was organised on 4–5 September, 2019. Representatives from 12 States presented their State status report of literacy rate of Muslims and *Madrasas* education. The sessions were conducted by the resource persons and the members of the Minority Cell. The major outcome of this meet was to provide equal access of provisions, funds and facilities to *Madrasas*, pre-service



National Consultation Meet of Madrasa functionaries on Minority Education



and in-service training to teachers of *Madrasas*, bridge course for students to enter into higher education linkages of *Madrasa* with NIOS, textbooks and other resource materials in the language as required by the state, etc. A meeting of Minority Cell was held at NIE, New Delhi on 6 September, 2019. It was suggested that the academic activities for improving the quality of minority education should be carried out in the form of research, development, training and extension activities.

DEPARTMENT OF TEACHER EDUCATION

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

In early sixties, the NCERT launched a scheme titled '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. In 2018–19, the scheme was revised with regard to its nomenclature, nature of participants, eligibility criteria, specification of themes, shortlisting of papers, number of awards, amount of cash prize, procedure of submission of papers, eligibility of cash prize, etc. 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, there of; to create an environment in schools and teacher education institution 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.

Selected teachers and teacher-educators were invited to present the report organised at NIE, New Delhi on 25–26 July, 2019. A total of 34 teachers/teacher-educators were awarded with cash award of ₹ 10,000/- and a certificate.

National Conference on School Leadership Practices, 2019

The national conference was conducted at NIE, New Delhi from 26 to 28 February, 2020 to explore various prevalent innovative and unique leadership practices in the schools of India, to address challenges and constraints faced by head teachers/administrators, their efforts and strategies to overcome them, to highlight efforts of the head teachers to integrate various issues viz., ICT, generic concerns to improve working conditions in school, staff motivation and commitment, etc. The themes covered in the conference include: school autonomy



Participant of the National Conference on School Leadership Practices 2020 receiving the certificate



leadership: a reconceptualisation, leadership style and organisational learning: the mediate effects of school vision, distributed leadership: implications for the role of Principal, school leadership and its impact on student achievement and learning outcomes, inclusive school leadership, nurturing school leaders. A complete session was devoted to poster presentation in which five posters were presented. The conference had representation from 19 States and a lot of interactions. The proceedings of the conference are consolidated in the form of a report. The conference brought out the crucial role played by the leaders in bringing out changes and reforms in schools and transforming school climate.

NCERT Incentive Award for Demonstration Multipurpose School (DMS) Teachers

The Scheme of NCERT Incentive Award was initiated in 2018–19 to honour and recognise the meritorious services of the teaching staff, who are working in Demonstration Multipurpose School (DMS) in Regional Institutes of Education (RIEs). This award signifies appreciation of their dedicated and sincere services rendered in the field of school education. The teachers/AHMs/HMs with at least 15 years of regular teaching experience will be eligible for the award. The applicant should have worked regularly for a minimum period of five preceding years in the category under which applying for the award. Finally selected applicants are awarded with cash prize of ₹ 20,000/- along with a certificate and a memento recording their contribution. This award is given once in the entire service period of teacher. The number of total incentive awards is 12 [03 for each DMS in each of 4 RIEs]. The awards are divided into following categories:

S.No.	Category of Awards for each DMS in Four RIEs	No. of Awards
1.	PRT	01
2.	Secondary school teachers (including TGTs/PGTs/AHMs/HMs and other teachers such as Physical Education Teacher, Work Experience Teacher, etc.)	02
Total Awards		03

The NCERT Incentive Award, 2018 which was given on NCERT’s Foundation Day (1 September, 2019) to Raja Kishore Nayak, TGT, Demonstration Multipurpose School, Regional Institute of Education, Bhopal.

DIVISION OF EDUCATIONAL KITS

Educational 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 the following kits.



NCERT Incentive Award 2018 awarded by Hon’ble MHRD Minister Dr Ramesh Pokhriyal ‘Nishank’ to Raja Kishore Nayak, TGT, DMS, RIE, Bhopal



S.No.	Educational Kits Developed by the NCERT
1.	<p>Upper Primary Science Kit with Microscope (UPSK) The kit offers scope for more than 200 activities at upper primary stage (Classes VI, VII and VIII) as outlined in the kit manual. The kit contains more than 130 scientific equipments, models and general items, chemicals, glass-wares, etc. The kit user manuals in English and Hindi versions have been developed and made available at sales counter of Publication Division, NCERT.</p>
2.	<p>Upper Primary Science Kit without Microscope (UPSK-WM) The kit offers scope for more than 200 activities at upper primary stage (Classes VI, VII and VIII) as outlined in the kit manual. The kit contains more than 130 scientific equipments, models and general items, chemicals, glass-wares, etc. The kit user manuals in English and Hindi versions have been developed and made available at sales counter of Publication Division, NCERT.</p>
3.	<p>Upper Primary Mathematics Kit (UPMK) This kit contains 19 items which can be used for performing activities of Classes VI, VII and VIII. A user manual in English and Hindi has also been developed. A video guide for upper primary Mathematics kit has been developed and is being made available through CIET Sales Counter.</p>
4.	<p>Secondary Science Kit with Microscope (SSK) This kit provides scope for various learner-centred activities on the chapters of science textbooks for Classes IX and X based on textbooks developed by the NCERT. By using this kit, laboratory experiments prescribed by CBSE for Classes IX and X can be conducted.</p>
5.	<p>Secondary Science Kit without Microscope (SSK-WM) This kit provides scope for various learner-centred activities on the chapters of science textbooks for Classes IX and X based on textbooks developed by the NCERT. By using this kit, laboratory experiments prescribed by CBSE for Classes IX and X can be conducted.</p>
6.	<p>Secondary Mathematics Lab Kit (SMLK) There are various kit items for Classes IX and X that helps conducting activities on the shapes, i.e., contents with cuboids, innovative geo board, trigonometric circle board, Pythagoras theorem square with five cut-outs, algebraic tiles, etc. The kit manual in Hindi and English versions is also available.</p>
7.	<p>Molecular Model Kit (MMK) The kit enables the students to explore the structure of simple organic, inorganic molecules and solids. This self-learning kit contains various plastic moulded models of atoms having a number of prongs and shapes in various colours. Prongs are used to make bonds to other atoms through tubings. The kit can be used to make models for most of the molecules as discussed in Classes XI and XII, NCERT textbooks. The kit has a detailed manual to enable the students to build the structure of molecules using kit items.</p>



8.	<p>Senior Secondary Physics Lab Kit (SSPLK)</p> <p>This kit is primarily meant for schools where either a functional laboratory does not exist or laboratory does not have proper instruments. Some of the instruments that are available in this kit are: optical bench, meter bridge, potentiometer, apparatus for verification of Boyle's law, apparatus for resonance of sound, diode and transistor characteristic apparatus, sonometer, resistance box, pan balance, etc. Most of the experiments and activities prescribed in the NCERT syllabus of Physics for higher secondary classes can be performed by using this kit.</p>
9.	<p>Senior Secondary Chemistry Lab Kit (SSCLK)</p> <p>The concerns like maintaining a pollution-free environment, cutting chemistry laboratory cost and handling of chemical wastes in addition to imparting meaningful chemistry education have been addressed by designing and developing Senior Secondary Chemistry Lab Kit. This kit contains special apparatus which limits the volume of the liquid reagent and the quantity of the solid chemical used without compromising on the observation skills and chemical principles involved. Conventional laboratory racks and bottles are replaced by plastic containers and unbreakable droppers.</p>
10.	<p>Senior Secondary Biology Lab Kit with Microscope (SSBLK)</p> <p>The kit contains all the necessary items and equipment to conduct the experiments mentioned in the biology syllabi of Classes XI and XII. The kit includes various items such as laboratory instruments, glassware, compound microscope, permanent slides, stains, cards, etc. The students will be able to do hands-on experiences of the experiments listed in the textbook and also understand various concepts.</p>
11.	<p>Senior Secondary Biology Lab Kit without Microscope (SSBLK-WM)</p> <p>The kit contains all the necessary items and equipment to conduct the experiments mentioned in the biology syllabi of Classes XI and XII. The kit includes various items such as laboratory instruments, glassware, compound microscope, permanent slides, stains, cards, etc. The students will be able to do hands-on experiences of the experiments listed in the textbook and also understand various concepts.</p>
12.	<p>Senior Secondary Mathematics Lab Kit (SSMLK)</p> <p>This Mathematics Kit has been developed for the students of Senior Secondary Stage based on the concepts given in textbooks. It is useful for learning mathematical concepts through hands-on, minds-on approach. The kit includes various items along with a manual for performing activities. The kit broadly covers the activities in the areas of sets, relations and functions, trigonometry, 3D, complex numbers, permutation and combination, probability, sequence, series, conic section, rectangular and square boards, etc.</p>
13.	<p>Early School Mathematics Learning Kit (ESMLK)</p> <p>This kit is made for students of Classes I and II. It contains eleven items; velcro models, tiles, stamping, containers play money, domino number cards, number cards, blocks, place value card, etc.</p>
14.	<p>Resource Package for Awareness in ECCE (English and Hindi)</p> <p>This kit contains banners, posters, leaflets, badges, puppets and other items. The manuals for kit in Hindi and English have been developed and the kit can be used for creating awareness on ECCE.</p>



15	Raindrops: Primary English Learning Kit This kit contains story cart, alphabet cube, anagrams, braille chart, mask, emogi coins, riddles, alphabet card, etc., which can be used for performing activities of Classes I and II.
16	Primary Urdu Learning Kit (PULK) This kit contains 19 types of kit items viz., stories, word games, braille chart, word tiles, urdu riddle, skill game, anagram, etc., which can be used for performing activities of Classes I and II as outlined in kit manual.

Under the Central Government flagship programme *Samgra Shiksha*, State Governments are procuring the educational kits at large scale either directly from NCERT or from NCERT empanelled firms.

Participation of DEK in National Events or Book Fairs

The educational kits have been showcased by the division in the following national events or book fairs.

S. No.	Name of the Programme	Organisation	Venue and Dates
1.	Destination Uttrakhand 2019	Friends Exhibition and Promotions	Dehradun 18–20 July, 2019
2.	Foundation Day of the NCERT	NCERT	NIE New Delhi 1 September, 2019
3.	Delhi Book Fair 2019	ITPO, New Delhi	Pragati Maidan 11–15 September, 2019
4.	Pune Book Fair 2019	Maharashtra Sahitya Parishad, Pune	Pune 28 September, 2019– 2 October, 2019
5.	JNNSMEE, 2019	NCERT	Raipur, Chhattisgarh 15–20 October, 2019
6.	Destination Gujarat 2019	Sansa Foundation, Delhi	Surendernagar, Gujarat 18-20 December, 2019
7.	ICT Award Function	NCERT	Dr Ambedkar Intentional Center Janpath, New Delhi 23 December, 2019

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

National Library of Educational and Psychological Tests (NLEPT)

The NLEPT aims to enrich the test library continuously and provide consultancy to the researchers regarding identification and use of the test materials. Two workshops were organised to review and evaluate educational and psychological tests in the area of guidance and counselling. Twenty-six reviewed tests were finalised for publication in the form of handbook. Thirteen educational and psychological tests in the areas of mental health, aptitude, intelligence, creativity, stress, well-being, personality, value, etc., were procured for the benefit of the researchers or practitioners. Consultancy was provided to the researchers regarding identification and use of the test materials.



HINDI CELL

Implementation of Official Language

To promote and ensure the proper implementation and discuss the progress in the Council, Hindi Cell organised three meetings of the Official Language Implementation Committee, one in each quarter, i.e., on 19 June, 2019, 23 September, 2019 and 23 December, 2019. The Quarterly Progress Reports based on the inputs received from the Departments/Divisions/Cells/Sections and Units of NIE were also submitted to the Ministry of Human Resource Development and the Department of Official Language, Ministry of Home Affairs, GoI.

Hindi Pakhwada and Hindi Day Celebrations

Hindi *Pakhwada* was organised in the Council during the month of September 2019 from 4–8 September, 2019. The following five Hindi competitions were organised namely, Noting and Drafting, Essay Writing, Hand-Writing, Translation and Typing. One hundred and twenty-one employees of the Council took part in the competitions with great enthusiasm and 24 winners were awarded with cash prizes and commendation certificates.

Seminar on Hindi Day

The Council organised a seminar '*Badalte Pariprekshya me Hindi*' for the faculty and employees of the Council at NIE, New Delhi on 13 September, 2019 to mark the occasion of Hindi Day.

Workshops and Inspections for Progressive use of Hindi in the Council

Hindi Cell organised workshops for faculty members, officers and other employees of the Council on Unicode Software, its usage and the Official Language Rules and Regulations, imparting practical training of noting and drafting, etc., on 30 May, 2019 and 29 November, 2019 and for the Administrative Officers and employees of Regional Institutes of Education at NIE, New Delhi on 12–13 March, 2020. Official Language Inspection programme to ascertain the status of official language were conducted in various Departments/Divisions/Sections of the Council.

Annual Award Scheme for the Employees

Under the award scheme of the Government of India for doing maximum day-to-day work in Hindi, seven employees of NIE, New Delhi viz., Pradeep Kumar Sharma, E.II Section, Manoj Kumar, E.II Section, Chanchal Kumar, E.II Section, Karan Kathuria, E.II Section, Poonam, C.R. Cell. Ram Nivas Sharma, V and L Section, Pramod Kumar, Publication Division were awarded with cash prizes and certificates.

Translation

Hindi Cell facilitates the hindi translation of the Council's official english documents. Under the provisions of The Official Language Act, 1963, office orders, memorandums, circulars, press notes, reports related to accounts and administration, agenda and minutes of different committees, etc., of the Council were also translated. In order to have the Council's website in a bilingual form, website material was also translated to enable its access in hindi as well.



Rajbhasha Shield Award for Utmost Work in Hindi

Rajbhasha Shield award was introduced in the year 2018. For the year 2019–20, it was awarded to Department of Gender Studies and Security Section for doing 100 per cent work in Hindi on the basis of quarterly reports for the year 2018–19.

LIBRARY AND DOCUMENTATION DIVISION

Information Literacy Programme for the Users of the NCERT

The programme was organised at NIE, New Delhi on 27 November, 2019 to introduce participants to concepts of information literacy, to practise information literacy skills in the electronic environment and to enhance the utilisation of the available resources of LDD. The sessions were conducted on the topic DELNET–Networking libraries, spreading knowledge by Sangeeta Kaul, *Network Manager*, and DELNET and on the topic how to use JSTOR database by Vineet Bhardwaj, representative from JSTOR. A discussion was held on how to access the resources available in other libraries.

Major Activities of LDD

1.	Acquisitions	Number/Rs
A.	Books Purchased	186
B.	Books Received as Gift	507
C.	Bound Journals Accessioned	Nil
D.	Withdrawn Books	164
2.	Expenditure on Books, Journals, Binding and PAC Programme	
A.	On Books	₹ 3,66,265/-
B.	On Periodicals, Journals and other Magazines	₹ 93,56,083/-
C.	On Stationery	Nil
D.	On Binding (Journals and Books)	Nil
E.	On P.A.C. Programme	₹ 5,32,030/-
	Total	₹ 1,02,54,378/-
3.	Resource Generated by LDD and Deposited in the A/C Section	
A.	Photocopy Charges	₹ 13,747/-
B.	Renewal Charges – Institutional Membership	₹ 2,000/-
C.	Lost Books (with 25 per cent surcharge)	₹ 239/-
D.	Loss of Library I-Card	-
E.	<i>Raddi</i>	₹ 12,500/-
	Total	₹ 28,486/-
4.	Journals Subscribed	
A.	Foreign Journals	110
B.	Online Database (J STOR-1; DELNET-1)	02
C.	Online Journals	44
D.	Indian Journals	43
E.	NCERT Journals	08
F.	Magazines (English-12, Hindi-08)	20
G.	Newspapers (English-10, Hindi-06, Urdu-01, Punjabi-01)	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)		13,747
	On Payment Basis		4,847
6.	Circulation Services		
A.	Membership as on 31/3/2019		1,575
B.	Membership enrolled during 2019–20 is as follows:		
	NCERT Employees		9
	Special (NCERT Retired Staff)		9
	JPF and Other Contractual		40
	Total Membership		1633
	Memberships Discontinued during 2019–20 (Due to superannuation or completion of projects) NCERT Emp. 45, Ext. Memb-09, JPF-40		94
	Total Membership as on 31/03/2020		1,539
C.	No Dues Certificate Issued		143
D.	External Readership who Availed Consultation (References facility during 2019–20)		578
E.	Total Number of Books Issued during 2019–20		988
F.	Total Number of Books Returned during 2019–20		681
G.	Books Issued on Inter Library Loan during 2019–20		267
H.	Books Borrowed on Inter Library Loan during 2019–20		52

PUBLICATION DIVISION

Grant of Copyright for Adoption/Adaptation/Translation to various States/UTs

The NCERT granted copyright of its textbooks to the under-mentioned States/UTs, based on their request, for adoption/adaptation/translation for the year 2019–20:

Copyright Permission for the Year 2019–20

S.No.	State	Agency	Classes for Which Copyright Given
1.	Madhya Pradesh	- Sanchalak, Rajya Shiksha Kendra, Bhopal, Madhya Pradesh	Classes I–XII



2.	Haryana	i.	Assistant Director, (Academic Cell) Elementary Education, Panchkula Haryana	Classes I–VIII
		ii.	Sahayak Nideshak (Shaikshik) Haryana Vidyalaya Shiksha Board Bhivani, Haryana	Classes IX–XII
3.	Gujarat	-	Director, Gujarat School Board of Textbooks, Gujarat	Classes I–XII
4.	Uttar Pradesh	-	Sachiv, Madhyamik Shiksha Parishad, Prayagraj, Uttar Pradesh	Classes IX–XII
5.	Mizoram	-	Commissioner and Secretary, School Education Department, Govt. of Mizoram, Mizoram	Classes I–VIII
6.	Delhi	-	Secretary, Delhi Bureau of Textbooks (DBTB), Janak Puri, Delhi	Classes I–VIII
7.	Uttrakhand	-	Madhyamik Shiksha, Uttrakhand Dehradun	Classes I–XII
8.	Punjab	-	Secretary, Punjab School Edu., Board, Mohali, Punjab	Classes VI–XII
9.	Chhattisgarh	i.	Ati. Sanchalk, SCERT, Raipur, Chhattisgarh	Classes VI–VIII and Classes XI–XII
		ii.	Rajya Madhyamik Shiksha Mission Pension Bada, Raipur, Chhattisgarh	General Books
10.	Goa	-	Director, SCERT, Goa	Classes I–VIII
11.	Jharkhand	-	Director, JCERT, Ranchi, Jharkhand	Classes IX–XII
12.	Rajasthan	-	Rajasthan Rajya Pathya Pustak Mandal, Jaipur	Classes I–VIII (Urdu)
13.	Karnataka	i.	Managing Director, Karnataka Textbook Society, Bengaluru Karnataka	Classes I, VI–X
		ii.	Director, Department of Pre-University of Education, Government of Karnataka, Bengaluru	Classes XI–XII

In total, 16 agencies of 13 States/UTs have obtained copyright permission in 2019–20.

All the above States/UTs have obtained copyright for NCERT textbooks published under *NCF 2005*, constituting a significant portion of the student community. During the year under report, 679 publications were released.

The Publication Division, NCERT has participated in various book fairs or exhibitions during the year 2019–20 as detailed below:

S.No.	Name of the Book Fair/Exhibition	During the Period	Book Fair Place
1.	Abu Dhabi International Book Fair	24–30 April, 2019	Abu Dhabi



2.	Delhi Book Fair	11–15 September, 2019	Pragati Maidan, New Delhi
3.	Pune Book Fair	28 September–2 October, 2019	Pune, Maharashtra
4.	46th Jawaharlal Nehru Science Mathematics and Environmental Exhibition for Children-2019	15–20 October, 2019	Raipur, Chhattisgarh
5.	Odisha State Book Festival II	06–12 December, 2020	Bhubaneswar, Odisha
6.	World Book Fair-2020	04–12 January, 2020	Pragati Maidan, New Delhi
7.	Matribhasha Diwas (Mother Tongue Day)	20 February, 2020	Dr Ambedkar International Centre Janpath, New Delhi
8.	Annual Book Fair-2020	26–27 February, 2020	Jammu

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Resource-cum-Activity Centre in ET/ICT for School and Teacher Education

The programme consists of training and activity programmes for learners of various age-groups, i.e., for school children, B.Ed. students and teachers. Under this, a Children’s Summer Camp for 77 children from Classes V–X from 3 to 14 June, 2019, an internship programme for 28 B.Ed. students and one M.Phil., orientation on ICTs in Education for four Assistant Secretaries (IAS officers of 2017 batch), Exposure visit to CIET by 500 B.Ed. and M.Ed. students from 16 institutions, attachment training programme for 63 participants from DTE and 66 from IDCPA, NIEPA were organised. ICT lab activities were conducted for Class V students of KV Primary School, NCERT campus, New Delhi. Apart from 12 newspapers and a variety of books, journals and periodicals have been procured and are available in the Library of CIET.



Children interacting with the Coordinator during the summer camp



PANDIT SUNDRLAL SHARMA CENTRAL INSTITUTE OF VOCATIONAL EDUCATION, BHOPAL

National Conference on Re-imagining Technical and Vocational Education and Training (TVET) for the Changing World: Perspectives and Practices

The two-day national conference was organised at PSSCIVE, Bhopal on 11–12 February, 2020. It was attended by TVET administrators, policymakers, officials from various ministries, researchers, academic professionals, representatives, and experts from various sector skill councils, national and international organisations, teachers, vocational trainers, students, practitioners and other stakeholders. The themes of the conference were emerging perspectives in the future of work, transforming TVET for Industry 4.0, up-skilling and re-skilling of today's workforce and TVET teachers 'development for Industry 4.0, TVET excellence and innovation, TVET for rural transformation and SDG 2030 implementation, future agenda for TVET and cross-sharing of experiences' and best practices and approaches of TVET excellence. In the keynote address on emerging perspectives in the future of work, Dr. Shyamal Majumdar, *Former Head, UNESCO-UNEVOC International Centre, Bonn, Germany* presented the major trends impacting the future of jobs and a new vision for TVET in the 21st century. He said that the Fourth industrial revolution or industry 4.0 will create disruptions in our lives. He added that any new innovation or technology will first create disruption and then lead to transformation. In the same session, Dr. Ramhari Lamichhane, *Director General, Colombo Plan Staff College, Manila, Philippines* spoke on TVET for Global, Competiveness: Need for 21st Century'.

The National Conference concluded with the Bhopal Declaration, a transformative vision of TVET for building a robust and inclusive ecosystem for Industry 4.0. The Bhopal Declaration 2020 set out following six actions for the promotion and advancement of TVET in Asia-Pacific region:

1. Facilitating Sustainable Development Goals through TVET for Education;
2. Preparing Learners for Future of Work;
3. Strengthening Governance and Increasing TVET Investment;
4. Promoting Work based Apprenticeship and Internship;
5. Starting Bottom-up Innovations for Catering Local Needs; and
6. Strengthening Gender Inequality in TVET.

Regional Consultation Meeting for Implementation of Vocational Education in Schools under Samagra Shiksha for the States of Southern, Eastern and North-Eastern Region

The regional consultation meeting-cum-workshop on vocationalisation of education in schools under *samagra shiksha* for Southern, Eastern and North-Eastern regions was held at the Institute on Management of Agricultural Extension (IMAGE), Government of Odisha, Siripur, Bhubaneswar on 16–17 January, 2020. In this meeting, 67 delegates from National Skill Development Corporation (NSDC), Wadhvani Foundation, Lend-A-Hand India, State or UT Directorate of School Education (*Samagra Shiksha*), State Councils of Educational Research and Training (SCERT), Sector Skill Councils which are from retail, health care, automotive, agriculture and sports sector skills councils and NGOs participated in the regional consultation meeting-cum-workshop. The



major recommendations of this meeting-cum-workshop were: using of activity based teaching-learning method for multi-skilled learning aspects should be promoted in vocational schools from Classes IX to XII; States and UTs should avoid change their courses frequently due to non-receiving of amount releases by Government again and again; States and UT's, NSDC, SSC's, PSSCIVE should follow structure, purchase and procedures to avoid malpractices while purchasing of infrastructure to the school labs for implementing VEP; States and UT's should introduce Central Ministry approved courses so that funds from the Central Government will not be constraints; Assessment scheduling will strictly followed and arranging suitable tools and equipments for assessing the practical activities in VEP; and good practices in vocational education adopted by the States/UTs for improving upon the effectiveness and quality in implementation is to be shared among them.

The institute placed key points related to NSQF, how it is formed and aligned with *Samagra Shiksha* under Ministry of Education. The importance of stakeholders like MoE, NSDC, NCERT and PSSCIVE, Bhopal in the implementation of vocational education in India was emphasised. India's role in supporting States in implementing of vocational education programme and pre-vocational courses from Classes VI to VIII was also highlighted during the meeting.

A panel discussion on 'Innovations in Teaching Learning for Vocational Education and a presentation of Sector Skill Council, on New Initiatives by SSCs for Strengthening of Vocational Education in Schools' were also conducted. The State representatives gave presentations on present status and good practices in vocationalisation of school education followed by presentations of 'Training Partners on Issues and Challenges in Implementation of Vocationalisation of Education in Schools and on Employability Skills in Vocational Education in India' by Vikrant Chandela of Wadhvani Foundation, Bengaluru.

Regional Consultation Meeting for Implementation of Vocational Education in Schools under Samagra Shiksha for the Northern and Western Regions

The second regional consultation meeting-cum-workshop on implementation of vocationalisation of education in schools for Northern and Western States was organised on behalf of Ministry of Education, Government of India on 30–31 January, 2020. Representatives from Maharashtra, Gujarat, Goa, Madhya Pradesh, Chhattisgarh, Jammu and Kashmir, Punjab, Haryana as well as from Sector Skill Council and National Skill Development Corporation participated in the consultation.

The main objectives of the meeting were to — comprehend the policies and programmes in the vocationalisation of education under the integrated scheme of school education; identify the challenges and resolve issues with respect to implementation of vocationalisation of education scheme in the school education; review the present status and share good practices in vocationalisation of secondary education in States/UTs; suggest priorities for research, development and training interventions for strengthening vocational education in schools; and prepare an action plan for effective implementation of vocationalisation of secondary and higher secondary education on identified areas. The major recommendations of the regional consultation meeting were:



vocational subjects should be made compulsory at higher secondary level; there is need to increase regular guest lecturer/field visit/educational tour for students; uniformity in the salary of teacher throughout country; better co-ordination between State Directorates and Schools; submission of utilisation certificate by States for early release of fund; lab should be set-up early prior to starting vocational course; reservation of vocational pass-outs in Polytechnic and Engineering College as well as technical courses; there is need to identify the third language of the secondary classes as one of the vocational subject throughout the country; and timely submission of results to NSDC for early issue of certificate and organising job fairs at least one in each year.

In-country Programme on Leadership and Change Management for TVET

An in-country programme on leadership and change management was organised by Colombo Plan Staff College (CPSC), Manila, Philippines in collaboration with PSSCIVE for the key functionaries of vocational education and training in the States/UTs of India. The programme was organised at PSSCIVE, Bhopal from 10 to 14 February, 2020. The main objectives of the training programme were to impart knowledge and techniques to the participants for becoming leaders and prepare them for application of change management principles in managing TVET Institute.

The programme was inaugurated by C.P. Sharma, Proprietor, Daulatram Engineering Pvt. Ltd., Raisen, Madhya Pradesh and Dr. Shyamal Majumdar, *former Head*, UNESCO-UNEVOC, Bonn, Germany was the Guest of Honour. Newly developed learning outcome-based curricula for vocational subjects were released during the inaugural session. Twenty-seven key functionaries in vocational education from States/UTs participated in the programme. The training course included fundamentals of leadership, functions of leaders and managers, concept of change management, consequences of not being able to manage changes, steps of change management and application of change management principles in the TVET institutes.

Presentations were made by Dr. Ramhari Lamichhane, *Director General*, CPSC, Manila, Rajesh P. Khambayat, *Joint Director*, PSSCIVE, Bhopal and Dr. Romulita C. Alto, *ICP Programme Co-ordinator*, CPSC. Group work was done by the participants on self-assessment of changes in competency leadership, application of change management tools in problem resolution and system development planning.

Extension Lecture Series

A lecture was organised at the PSSCIVE on 30 July, 2020 in which Dr A.L. Ram, Clinical Psychologist spoke on the topics 'Gauging the hurdles and achieving goals'. He explained how to increase efficiency in the institution by removing the obstacles or problems. He also focused on the obstacles that come in the way of success at the workplace and pointed out that the biggest problems are inadequate planning, lack of leadership skills and lack of team spirit. During his lecture session, he also explained in detail about the two types of personality and stated that which of the personality is positive and progressive and which is not. He also informed the aspects that we should keep in mind to be positive and progressive.



REGIONAL INSTITUTE OF EDUCATION, AJMER

Internship Programme

As an integral part of the teacher education programme, prospective teachers of B.Sc.B.Ed., B.A.B.Ed. and B.Ed. needs to be educated and trained for professional efficiency. In this programme all the students of different programmes were placed in 27 Jawahar Navodaya Vidyalayas, Jaipur and Lucknow region. During the programme of four weeks' and sixteen weeks' duration, they experienced actual classroom situation. Their supervisors got opportunity to observe how the students handle situations in the classroom.

M.Ed. Internship and Field Attachment Programme were organised in two phases. M.Ed. second year students were placed in IASE and CTE, Ajmer for internship and field attachment in the month of August, 2019. M.Ed. students were placed in local schools of Ajmer in January 2020 for internship and field attachment programme. A separate orientation programme for both the groups was organised in the institute regarding role and functions of interns during internship followed by related field assignments.

Working with the Community

Working with community programme was conducted from 9 to 18 December, 2019. For this programme, 94 students of B.Ed. first year with faculty members of the institute visited special and inclusive schools, old age homes, Barefoot College, Tilonia Village, Ajmer. Besides, the students have been exposed to various Government Schemes and Programmes being run by the State such as MNREGA, *aanganwadi* centres, health programme of ayurved department at Kadel and Dungaria Kala villages of Pushkar. B.Ed. first year students interacted with the Panchayat members and collected information related with various Governemnt schemes in rural areas. The students were exposed to initiatives of Red Cross Society, Ajmer with special reference to first-aid training. Plantation and value-based cultural activities were also part of working with community programme.

Inter-house Science Activities

In order to promote creative and constructive atmosphere, Inter-house Science activities were organised on 27 November, 2019 for the students of all the houses under the guidance of respective house advisors and students' advisor of the institute. Inter-House Science activities including quiz, extempore and best out of waste competitions were held.

Extension Lectures of Eminent Educationists

This extension programme aimed to enlighten the students and faculty on issues of vital importance in the field of education and to provide a forum to students and staff for academic interaction with eminent educationists. Besides, the programme helped in enriching the knowledge and understanding of trainees and faculty by way of sharing of the experiences of the persons of eminence in the field of education. During the year, the following lectures were conducted.



S.No.	Topic	Name of the Speaker	Venue and Date
1.	Foundation Day of NCERT	Daya Pant, <i>Professor</i>	1 September, 2019
2.	Foundation Day of RIE , Ajmer	K.C. Sharma, <i>Professor</i>	31 October, 2019
3.	<i>Rashtriya Ekta Diwas</i>	K.C. Vashishtha, <i>Professor</i>	31 October, 2019
4.	National Education Day	Sudhakar C. Agrekar, <i>Professor</i>	11 November, 2019
5.	National Science Day	C.B. Sharma, <i>Professor</i>	28 February, 2020

Expression Series on Eminent Personalities

The specific objectives to organise expression series on eminent personalities are to promote and preserve cultural heritage of the nation and to promote literary activities among students to enhance their thinking skills, to bring out their creative expression and to promote constitutional values. During the year, the following lectures were conducted.

S.No.	Topic	Name of the Speaker	Venue and Dates
1.	Expression Series on Teachers Day	Nemichand Tamoli	5 September, 2019
2.	Expression Series on Mahatma Gandhi	Poonam Srivastava	2 October, 2019
3.	Expression Series on Constitution Day	Manoj Awasti	26 November, 2019
4.	Expression Series on Mathematics Day	J.K. Prajapat	22 December, 2019
5.	Expression Series on Youth Day	Bhupendra Ubana	12 January, 2020
6.	Expression Series on International Mother Tongue Day	Janardan Sharma	21 February, 2020
7.	Expression Series on Science Day	Ganpat Singh	28 February, 2020

Workshop for Heads and Co-ordinating Teachers of Co-operating Schools for Internship 2019–20

Internship in teaching programme is one of the important activities of the institute for its pre-service programmes. The workshop for heads and co-ordinating teachers of co-operating schools for internship programme was organised in the institute on 11–12 July, 2019. It was attended by external Heads of the schools including Assistant Commissioner, Principals and co-ordinating teachers of Navodaya Vidyalaya of Jaipur and Lucknow region to finalise the strategy to organise internship programme in their respective schools. Institute's final year students of B.Ed, B.Sc.B.Ed. and B.A.B.Ed. were also attended this workshop.



Independence Day and Republic Day Celebration

The days were celebrated at RIE campus with full fervour and zeal by the students and staff of the RIE and DMS. On the occasions, the Principal of the Institute, S.V. Sharma, hoisted the national flag at the Institute’s premise. Then NCC cadets performed the March-past parade followed by cultural programmes.



Celebration of the Independence Day at RIE Campus, Ajmer

National Science Day Celebration

In order to commemorate the contribution and discovery of Sir C.V. Raman, the National Science day was celebrated in the institute on 28 February, 2020. On this occasion, an extension lecture was delivered by the Chief Guest, Dr. C.B. Sharma, *IPS (Rtd.)* on the topic *Revolution in Digital Technology and its Challenges*. The contribution and work of Sir C.V. Raman was displayed in DMS through presentation by students of Science and Mathematics Education Club (SMEC). It was followed by Science quiz competition, crossword puzzle and extempore competitions. A lecture-cum-discussion with students of DMS by Anil Kumar Nainawat, *Associate Professor* in Chemistry on theme ‘Women in Science’ celebration was also conducted.



Celebration of National Science Day



Academic Lecture Series

The institute has a well-established and functional interactive forum for academic staff and teachers of Demonstration Multipurpose School. The purpose of organising academic lecture series is to make members of the faculty and teachers share their experiences related with academic concerns and issues of importance in education, with special reference to school education. This forum is usually organised on every Wednesday. During the session 2019–20, following lectures were organised:

S.No.	Date	Topic	Delivered by
1.	28-08-2019	Draft National Education Policy-2019: Key Observations and Recommendations	S.V. Sharma, <i>Principal,</i> RIE, Ajmer
2.	11-09-2019	Blended Learning	Vijay Kumar Yadav, <i>Assistant Professor</i> (Contractual), RIE, Ajmer
3.	18-09-2019	Constructivism: Perspectives and Practice	A.V. Jayalaxmi, <i>Assistant Professor</i> (Contractual), RIE, Ajmer
4.	25-09-2019	Education for Sustainable Development : Need of Present to Ensure Better Future	Jyoti Mishra, <i>Assistant Professor</i> (Contractual), RIE, Ajmer
5.	09-10-2019	<i>School Pathyacharya mein Vyavasayik Shiksha Ki Aavyshaktha</i>	Sneh Sudha, <i>Assistant Professor in Hindi,</i> RIE, Ajmer
6.	09-10-2019	Implementation of NCERT Interventions at School Stage: A Block Level Research Project and Visit/ Observation of School in Hurda Block of Bhilwara Rajasthan	S.V. Sharma, <i>Principal,</i> RIE, Ajmer
7.	16-10-2019	Intelligent Quotient and Intellectual Disability	Rajiv Ranjan, <i>Assistant Professor,</i> RIE, Ajmer
8.	23-10-2019	Research in Education	Muzammil Hassan, <i>Assistant Professor,</i> RIE, Ajmer
9.	6-11-2019	Curriculum and Pedagogy of Language Education	Ranjana Nagar, <i>Assistant Professor in</i> English, RIE, Ajmer
10.	20-11-2019	Working with Community Programme	Meenakshi Meena, <i>Assistant Professor,</i> RIE, Ajmer
11.	13-11-2019	Celebration of National Education Day Work and Life of Maulana Abdul Kalam Azad	Rajesh Mishra, <i>Professor (Urdu),</i> RIE, Ajmer



12.	4-12-2019	Language Pedagogy	Rajesh Mishra, <i>Professor, RIE, Ajmer</i>
13.	18-12-2019	Teaching Learning in Mathematics	P.K. Chaurasia, <i>Head, DESM, RIE, Ajmer</i>
14.	01-01-2020	Use of Modern Devices for School Education	Rana Pratap, <i>Assistant Professor, RIE, Ajmer</i>
15.	08-01-2020	Textbooks Analysis	Kritika Mishra, <i>Assistant Professor (Contractual), RIE, Ajmer</i>
16.	17-01-2020	Use of Augmented Reality for Effective Teaching of Science	Sudhakar C. Agarkar, <i>Professor, Homi Bhabha Center for Science Education, TIFR, Mumbai</i>
17.	22-01-2020	Teaching Learning in Social Science and Internship Programme	Nirmal Tanwar, <i>Assistant Professor (Contractual), RIE, Ajmer</i>
18.	29-01-2020	<i>Samaveshi Shiksha ke Prathi Vidhyalya ke Pradhan Adhyapako evam Adhyapako ke Drishtikon ka Adhyayan</i>	Monu Singh Gurjar, <i>Assistant Professor, (Contractual), RIE, Ajmer</i>
19.	28-02-2020	Revolution in Digital Technology and its Challenges	C. B. Sharma, Retd. <i>IPS and Digital Technology Expert</i>
20.	04-03-2020	Science Education for Sustainable Development	O. P. Meena, <i>Assistant Professor, RIE, Ajmer</i>
21.	11-03-2020	Initiatives Strategies and Practices Adopted under the Block Level Research Project in the Hurda Block of Bhilwara District of Rajasthan State	A. K. Arya, <i>Associate Professor, RIE, Ajmer</i>
22.	18-03-2020	A Study of Parental Attitude towards Professional Education of Girls	Kashifa Khan, <i>Assistant Professor (Contractual), RIE, Ajmer</i>

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

National Conference on Implications of ‘Gandhians Thought’ for School Curriculum

A two-day national conference on ‘Implications of Gandhian Thoughts for School Curriculum’ (30–31 January, 2020) was held to commemorate the 150th birth anniversary of Mahatama Gandhi. Several philosophies and concepts of Gandhi and their applications in the transformation of school curriculum have been discussed in four different technical sessions under six broader themes on 30–31 January, 2020. Mohammad Akhtar Siddiqui, *Former Chairperson, NCTE, New Delhi* was the chief guest and Padma Shri Babulal Dahia, a Gandhivadian Kisan was the special guest for the occasion. About 90 scholars have presented



their views on different aspects of Gandhian Thoughts. Personalities like Padma Shri Babulal Dahiya, Shri Anil Trivedi, Shri Dayaram Namdev, Shri Prabhakar Ajbe, Smt Shaila Ajbe, Smt Suraj Damor and Rupal Prabhakar all set an example of Gandhi in recent world by their social work and felicitated by the institute on this auspicious occasion. The conference recommended that there is a need to inspire scholars to reach out to Gandhi's work and teachings to help them put Gandhian thoughts in modern perspective. It is important to rediscover the vision of Gandhian Education and connect it to school. Moreover, there is a need to visualise the significance of girls' education in the Gandhian thoughts.

Organisation of Extension Lecture Series

Extension Lecture Series are organised to initiate dialogues on the new trends and priorities in education, to generate thinking and discussions among educational functionaries and to exchange views and ideas about the current scenario of school education and teacher preparation. Three lectures were organised under the Extension Lecture Series programme. The first lecture was on 'Teacher Education: A Gandhigram Experience' by M.A. Sudhir, *UGC Emeritus Professor, and former Head and Dean, Applied Research, Gandhigram Rural Institute-Deemed University, Gandhigram* on 17 February, 2020. Experience about Gandhigram's Teacher Education programmes, internship activity and different pedagogical practices in Gandhigram Rural Institute were shared with the participants. Lectures were delivered by Dr Geeta and Dr Deepshikha from Pt Khushilal Sharma Ayurvedic Hospital, Bhopal on the occasion of Women's Day on 8 March, 2020. Dr Geeta explained the importance of Ayurveda in our life and Dr Deepshikha suggested some Ayurvedic medicines for boosting our immunity in the context of COVID-19.

Internship Programme

One of the flagship programmes is internship in teaching for B.A. B.Ed., B.Sc. B.Ed. VII semester and 2 year B.Ed. III semester students. A total of 200 students were placed in DMS, KVs, JNVs and MP Government, schools to gain the overall teaching experiences for their coming future. This 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 from the ground reality.

Working with the Community

Working with the Community is a programme to provide the real-life community experience to the student-teachers. The student-teachers stay in a village for five days and work with the community. In the 2019–20 session, the programme was organised in Ichhawar Block of Sehore district, Bhopal, MP from 20 to 26 November, 2019 for 110 students of B.Sc.B.Ed. (III Semester) and B.A.B.Ed. (III Semester). They conducted village surveys in eight villages of the block to study literacy level, drop-out rate, economic status, facilities available in schools, the social status of women of different groups, the facilities available in the villages, etc. Cleanliness and sanitation campaign was carried out in the villages. The message of *Swachh Bharat Abhiyaan*, importance of literacy, etc., were also given for creating awareness among the villagers on different social issues like cleanliness, child marriage, girls education. The programmes



like skit, song, dance, drama, door-to-door campaign on 'Save the Girl Child', etc., were conducted. On 24 November 2019, a cultural programme was also organised in the camp as part of the awareness campaign.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

International Conference on Education in the Twenty first Century

A workshop was organised as a prelude to the conference at RIE, Bhubaneswar on 12–13 September, 2019 for deciding the modalities for conducting the conference in collaboration with UNICEF and Commonwealth Educational Media Centre for Asia (CEMCA). In all, 390 papers were received, from which 75 papers were selected. Twelve out of the 75 registered papers were considered for poster presentation and the remaining for oral presentation. Vasudha Kamat, *Former Vice-Chancellor* of SNDT University, Mumbai delivered the keynote address in the inaugural session and S.M. Pattnaik, *Vice-Chancellor* of Utkal University graced the occasion as chief guest. The conference was attended by 70 participants who presented their papers. Twenty-five Resource Persons deliberated on various issues and conducted the paper presentations as chairpersons and co-chairpersons.

Field Work with Community

In order to provide community experiences to the B.Sc.B.Ed. student-teachers of RIE, eight days field work with community programme was organised at Badkul village of Chilika Block, Odisha. The student-teachers of the institute stayed in the village for eight days and carried-out activities like conducting educational survey of the village, case study of the families, awareness programmes on literacy, sanitation, cultural programmes for AIDS awareness, etc.

Pre-school Education in Demonstration Multipurpose School

The objectives of the programme were to organise developmentally appropriate practices for pre-school children. Learning resources have been developed and the teachers and helpers were oriented on developmentally appropriate practices. Weekly action plan and corresponding activities for physical development, language development, socio-emotional and cognitive development were prepared for the successful implementation of the programme. A format on developmental profile of students was developed depicting developmental characteristics of pre-schoolers. Frequent interaction sessions with parents were organised for students on different areas of developmental practices. The parents were oriented on pressures on pre-schoolers, importance of creating enabling environment at home, importance of 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. Centre based researches on school readiness of children revealed that children scored high in cognitive and socio-emotional dimensions. The reflections of parents, teachers and team members revealed need for provision of more facilities and resources.



Organisation of School Exposure and Multi-cultural Placement Programme of B.Ed. Students

The objectives of the programme were to expose and provide school-based experiences to student-teachers during the initial years and to orient and impart on school functioning and processes in multi-cultural context in selected schools. The programme comprised two phases of activity: School Exposure in the first semester and Multi-cultural Placement in the second semester. Both the school exposure and multi-cultural placement were further divided into three phases: (a) Pre-conference, (b) Exposure to the schools/ multi-cultural placement, and (c) Post- conference. For these sessions, both the school exposure and multi-cultural placement programme was organised at Chilika, Balugaon, Odisha wherein 100 B.Ed. 1st year students were placed at private and public schools to experience and understand the culture and its functioning of the schools. The experiences gained in a contextual milieu within and outside the schools were shared by student-teachers as part of the feedback during the post-conferences.

In the school exposure that was held from 26 September to 3 October, 2019 activities like observation, school functioning were assigned to students by providing formats. The main intention of these activities was to develop an insight into the role of a teacher and appreciate school activities in totality. Multi-cultural placement programme was held on 6–17 January, 2020. Activities like observation, case study, substitute teaching, school profile were assigned to students and a format was provided. This enabled them to understand learners in different contexts and developed awareness about the functioning of the school as the integral part of the community. All experiences were shared by student-teachers as part of feedback for the further improvement of the programme.

Internship for B.Ed. III Semester Student-teachers

The internship was organised in three phases such as pre-internship, internship and post-internship. The pre-internship workshop for student-teachers was held from 2 July 2019 to 5 July, 2019. Two days pre-conference was held at RIE, Bhubaneswar on 8–9 July, 2019 for the co-operating school heads, teachers and student-teachers. Ninety-seven student-teachers were placed in 14 JNVs located in Bihar, Jharkhand, Odisha and West Bengal from 12 July, 2019 to 20 November, 2019 for internship. Student-teachers were involved in different activities such as observation of classes of co-operating teachers, peer observation, development of unit plan and lesson plan, teaching, conducting action researches, developing teaching-learning materials and achievement test and maintain reflective diary, etc. Post-internship programme was held at the institute on 25–26 November, 2019 for sharing innovation, challenges and experiences.

Internship for B.Sc. B.Ed. VII Semester Student-teachers

The internship programme was organised in three phases such as pre-internship conference, internship and post-internship conference. Three days pre-internship conference was organised at RIE, Bhubaneswar from 9 July, 2019 to 11 July, 2019. All the co-operating school heads, teachers and student-teachers attended the pre-internship conference. The student-teachers



were facilitated with all the modalities of the internship process. One hundred one student-teachers of the institute were placed for school-internship in 13 JNVs located in Odisha, Jharkhand, Bihar and West Bengal from 15 July, 2019 to 26 August, 2019. Student-teachers were engaged as a regular teacher in the JNVs and involved in the activities such as observation of classes of the co-operating teachers, peer observation, unit plan and lesson plan, teaching in the classes, developing teaching-learning materials and achievement test and maintain reflective diary, etc. Post-internship conference followed by the teaching aid exhibition was held at RIE, Bhubaneswar on 26 August, 2019 for sharing the experiences and challenges faced by the student-teachers during internship programme.

Working with Community Programme for B.Ed. Students

The main objective of the programme was to familiarise trainees with the community, its social, political, cultural and educational features and how these features influence education of children. The programme was held in Dasarathi Cluster, Chilika Block, Odisha from 28 January to 3 February, 2020. For the programme, the trainees visited villages such as Jaripada, Matiapada, Panidwar, Pachupatia, Jagannathpur, Baunsamula, Uashpadar and Totapada and conducted different activities like discussion, rally, debate, poster, cleanliness, etc., in collaboration with the local people. Trainees conducted street play on different themes such as adverse effect of population growth, drug abuse, gender equality and population education, *swachhta*, and health and hygiene. Surveys on educational status of local village, implementation of the RTE Act, population education and gender equality, primary education and community resources available in community were conducted by the trainees during the programme.

Celebration of International Women's Day

The International Women's Day was observed on 8 March, 2020 preceded by a poster competition among the students of the institute on 7 March, 2020. The students delivered speeches, read out self-composed poems and songs expressing their feelings regarding the role of women in families and societies and also on the issues such as gender equality, women empowerment, rights of girls, female foeticide, contribution of women in different fields, etc.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

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

The institute conducts Early Childhood Education (ECE) programme to ensure sound school readiness and all-round development of the children, to establish a linkage with the primary school, to promote social, emotional, cognitive and aesthetic appreciations in children and to ensure right to Early Childhood Education.

During the year, 25 children each were admitted to the lower and upper KG. Children in the pre-school were given adequate and regular opportunities for engaging in interesting and age-appropriate outdoor and indoor play activities. Under the programme, theme-based various indoor and outdoor activities conducted as per the guidelines and curriculum provided by the Department of Elementary Education, NCERT, New Delhi. To ensure the joyful learning



through play-way mode and self-learning, different activities and plays were carried out for two different groups covering celebration of important days, national festivals, cultural events, activities on good health habits, life skills, outdoor physical games and one day trip, mathematical understanding and reasoning, language skills and plays to connect the students with immediate environment. These activities were conducted providing adequate opportunities to each child. The programme ensured that the children are ready for school system and suitable learning activities and learning materials that ensured the development of cognitive, language, physical, socio-emotional, creative and aesthetic skills and abilities of the children that are required for the next stage.

Extension Lecture Series

The lecture series is conducted with the specific objectives to provide a special forum for both students and faculties for academic discussion with scholars in different areas of knowledge, to promote a healthy debate and interaction on various areas of contemporary concerns and interests and to generate interest and enthusiasm among students and faculties in various fields of knowledge.

As a part of Extension Lecture Series the following extension lecture activities were conducted. (a) On 9 July, 2019 an extension lecture was delivered by Prof K. Ramachandran, *Professor*, former Faculty of NCERT and *Consultant* MHRD and NIEPA on Draft National Policy on Education. (b) On the 1 August, 2019, the 57th Foundation Day of Regional Institute of Education, Mysuru was celebrated where the *Janapith* Awardee in Kannada, Chandrashekar Kambara, and Chairman of the Kendra Sahitya Academy delivered Sardar Pannikar Memorial Lecture. (c) On the 1 September, 2019 on the occasion of 59th Foundation Day of the NCERT, Dr K.S.M.S. Raghavarao, *Director* of CFTRI, delivered the Foundation Day Lecture. (d) On 11 November, 2019 the National Education Day Lecture was delivered by Mohandas B. Menon. (e) On 26 November, 2019 Constitution Day was observed, where Basavaraju, *Professor, Director*, School of Law, University of Mysore, delivered a lecture on the importance and significance of Constitution Day. (f) On 14 January, 2020 National Youth Day was celebrated. Seetharam delivered a lecture on the importance of National Youth Day. (7) On 20 February, 2020 *Matrubasha Divas* was organised where A.S. Dasan, former *Professor of English*, University of Mysore, delivered a lecture on the significance of the day.

Celebration of Independence Day

Y. Sreekanth, *Principal*, RIE, Mysuru, the chief guest took the guard of honour from the students of DMS and RIE, Mysuru. After unfurling the national flag, he addressed the students and explained about the supreme sacrifices of the Indian soldiers and the freedom fighters of India. The students of RIE and DMS sang patriotic songs in different regional languages. The tiny tots of pre-primary school performed a play on unity in diversity.

Celebration of Republic Day

Y. Sreekanth, *Principal*, RIE, Mysuru, the chief guest took the guard of honour from the students of DMS and RIE, Mysuru. After unfurling the national flag, he addressed the students and explained about the significance of the republican structure of India and the importance of the Constitution and the federal structure of States to the students.





Celebration of the Independence Day

National Science Day Celebration

In order to popularise Science among students, to create awareness about recent scientific development, and to benefit student community with scientific advancement around the world, the Institute celebrated National Science Day on 28 February, 2020 that was the culmination point of the month long activities related to science. It included Invited talks, paper presentation sessions on 28 February, 2020, a science exhibition on 28 February, 2020 and a science quiz competition on 26 February, 2020. School students and college students participated in inter-school and inter-college competitions. Asha Martin, *Principal Scientist*, CSIR-CFTRI, Mysuru, delivered a special talk on ‘Women in Science and Recombinant DNA Technology and Genetically Modified Crops’. The chief guest distributed the prizes to all the winners of the competitions.



Dr Asha Martin, CSIR-CFTRI Principal Scientist, inaugurating the national science day celebration

Pre-internship Conference for Co-operating School Teachers of NVS and PU Lecturers

The institute organised pre-conference for school teachers to know about the process of student-teachers’ classroom transactions and role to play in school environment. A two-day pre-internship conference was conducted for two year B.Ed. student-teachers on 24–25 June, 2019. In this conference, the teachers of Adarsha Vidyalaya of Mysuru Districts of Karnataka State and teachers from RAMCO Schools of Tamil Nadu and Andhra Pradesh participated. During the orientation programme, the objectives of longer duration internship programme were briefed. Also, an orientation on preparation of lesson plan and effective classroom teaching based on 5-E Model was provided to the Science, Social Science and language teachers.



Similarly, two days pre-internship conference for co-operating schools of JNV's was organised on 27–28 June, 2019. For this internship, around 150 students from VII semester B.Sc.B.Ed., B.A.B.Ed. and M.Sc. Ed. were involved. These students were allotted to select 34 JNV's of Karnataka and Andhra Pradesh and JNVs of Hyderabad Region. The Principal, Vice-Principal and subject teachers from selected JNV's were invited for the conference. The first day was devoted to orient the school heads and co-operating teachers highlighting their role and responsibilities in the internship activities. New initiatives that are adopted in teacher training programme, like adopting constructivism and 5-E model in writing of lesson plan and unit plan, evaluation profiles, observation schedule, etc., were discussed keeping in mind the co-operative teachers are supposed to act as mentors for trainees.

On the second day, the pre-lesson discussions were held. Actual show casing of lessons by the pedagogy teachers' or student-teachers followed by post-lesson discussions were held. During the pre-lesson discussions, the lesson plans were distributed to the co-operating teachers and the plans were also projected. During this projection, every component of lesson was discussed, starting from learning objective, teaching points, learning resources, pre-requisites of the lesson and approach adopted in delivering the lesson.

On 29 June, 2019, one-day pre-internship conference for M.Sc.Ed. XI Semester students was organised in which lecturers from Pre-University Colleges of Mysuru participated. During this orientation programme, 5-E model in writing of lesson plan and unit plan, evaluation profiles, observation schedule, etc., were discussed keeping in mind that the co-operative lecturers are supposed to act as mentors for trainees. It was followed by demonstration of lessons and post-lesson discussions.

Internship Programme

Internship is the main crust of integrated four-year courses of B.A.B.Ed./ B.Sc.B.Ed./M.Sc. Ed. and two-year B.Ed. and six-year M.Sc. Ed. programmes of Regional Institute of Education, Mysuru. Internship provides an excellent opportunity to the student-teacher to learn the classroom transactions, process skills, attitudes and appreciations in the real classroom situations. They also actively participate in all the regular activities of school. During this process, student-teacher will get opportunities to develop interests and abilities for shaping the student-teacher as a professional teacher of tomorrow.

Two-year B.Ed. programme had longer duration of internship in two phases, Phase I was from 1 July to 30 September, 2019, where students-teachers were allotted to both Adarsh Vidyalayas Schools and RAMCO Schools. Second Phase started from 15 October to ended on the 30 November, 2019. During this long duration internship, student-teachers prepared four unit plans and 60 lesson plans in each pedagogy, with the support of ICT and relevant teaching-learning resources that was observed and mentored by the institute and respective co-operative teachers of schools.

Internship for VII semester of B.A.B. Ed./ B.Sc.B.Ed./ M.Sc.Ed. was carried out for eight weeks, from 1 July to 24 August, 2019. For this, 29 JNV's of Hyderabad region were selected, 24 from Karnataka and five from Andhra Pradesh. During this long and intensive internship, student-teachers prepared



two unit plans and 20 lesson plans in each pedagogy, with the support of ICT and relevant teaching-learning resources.

Twenty-day Internship for M.Sc. Ed. XI semester was held from 1 to 20 July, 2019 in six local Pre-university colleges, i.e., Maharani and Maharaja Pre-University College, Government Girls' Pre-university College Peoples Park, Government Pre-university College Kesare, Government Pre-university College, Ilawala and Government Girls' Pre-university College, Nizamiya, Rajendranagar. MSc. Ed. Physics, Mathematics and Chemistry student-teachers prepared 10 lessons, which were observed and mentored by the Institute supervisors and co-operative lecturers.

Post-internship conference VII semester B.A.B.Ed./B.Sc.B.Ed. and M.Sc. Ed. programme was conducted on 16 and 17 September, 2019 and on 27 November, 2019 for two-year B.A.B.Ed. student-trainees in the Institute after completion of their internship teaching programme. Small groups, subject-wise were made and allotted to the mentors to observe the internship records, reflective diary and every student presented report on internship experiences. Post-internship conference for XI semester M.Sc. Ed. student-teachers was conducted on 2 August, 2019.

Working with Community

As part of providing community experience to students, the students of VI semester B.Sc.B.Ed., B.A.B.Ed., M.Sc.B.Ed. and II semester B.Ed. were exposed to community living at Hunsur Block from 20 to 24 January, 2020. On the first two days, the students visited the schools at Hunsur and did household survey. They visited villages Thattakere, Mookanahalli, Agaranahalli and Ramapattana. On the fifth day, a rally and role play was done to create awareness on various issues like female feticide, drug abuse, girls' education and protection of environment. On the last day, there was mass plantation at various schools of Hunsur city.

NORTH EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM

National Seminar on Science Education, 2019

A two-day National Seminar on Science Education was organised at NERIE on 14-15 November, 2019 with the objective to provide a platform for sharing latest content, teaching strategies, researches to all stakeholders; to make suggestive measures for future course of action; and to document the best practices in the field of School Science to enhance and expand professional growth and enrich the quality of School Science. The themes of the seminar were — Science Education for Sustainable Development, Innovative Practices in Science Education, Implementation of Educational Policies and their Impact on Science Education, Traditional Knowledge in Science Education, Science Learning — Issues and Concerns, and Popularisation of Science Education. Amarjyoti Choudhury, *Professor*, the chief guest, delivered a very descriptive and illustrative talk on innovative Science education which includes all characteristics of science and usage of artificial intelligence in the Science class. The major recommendations were: teaching of Science subject as a means of transmission of indigenous knowledge for preservation of the environment



integrating with modern scientific concepts should be made a compulsory component of Science curriculum for sustainability at local level; considering the importance of technological pedagogy in enhancing concept clarification through demonstration, further intensive training for school teachers in ICT will be important step towards enhancing learning outcomes; utilisation of innovative and low-cost or no-cost materials for teaching of science through ‘learning by doing’ will enhance curiosity and scientific attitude among students; Head teachers’ instructional leadership is a crucial issue in school improvement and play a critical role in motivating teachers and creating a culture of active learning. Role of Head teachers and capacity building is to be revised accordingly; In-service teachers who attended training on pedagogy exhibit more interest and scientific way of student evaluation and more understanding of Science than the teachers not attended training programmes. Therefore, school teachers need more training programmes on inculcation of scientific temper rather than general pedagogical aspects. Condition of school laboratory and insufficient number of teachers are some of the important factors for low interest towards Science among secondary students and improvement in Science laboratory for secondary schools is to be taken care at policy level.

Celebration of 59th NCERT Foundation Day

NERIE, Umiam celebrated 59th Foundation Day of NCERT on 1 September, 2019. The chief guest of the programme was Arup Kumar Dutta, a Padmashree awardee, a prolific writer and an eminent teacher of English Literature. In his inaugural address, he emphasized on the importance of reading books to develop creative imagination, the words in the books has the power to activate the mind. He added that, it is only because of this power of the mind many inventions and discoveries happened.

Swachhta Abhiyan

Swachhta Abhiyan was taken up with the theme *Swachhta hi Seva* in NERIE, Umiam, from 1–15 September, 2019. As part of the programme, a talk on ‘Importance of Health and Hygiene’ by Dr Felix Majaw, Dispensary NERIE, Umiam on 13 September, 2019 and on ‘Health and Hygiene’ by F.G. Dkhar, *Professor*, on 11 September, 2019 were conducted. Ms Julie Christine Wahlang, the insititute Nurse demonstrated correct hand washing technique to the students of B.Ed. on 9 September, 2019. Cleanliness Drive for cleaning the hostel mess and a letter writing competition for the B.Ed. students were also organised.

150th Birth Anniversary of Mahatma Gandhi

On 1 October, a quiz competition on the life and philosophy of Mahatma Gandhi and a documentary competition for B.Ed. students were held. On 2 October, *Shramdaan* was held in and around NERIE campus. A talk on ‘Truth, Non Violence and Conflict Resolution: Relevance of Gandhi in our everyday life’ by Bhagat Oinam, *Professor*, Centre of Philosophy, and Chairperson and Concurrent Faculty, Special Centre for the study of North-East India, JNU, New Delhi was held in which he pointed out, how truth need to be time tested as realities are changing and therefore, one has to be tolerant about other’s perspectives.



Observance of Vigilance Awareness Week

Vigilance Awareness Week was observed in the institution from 28 October to 2 November, 2019. Pledge Taking, display of posters made by the B. Ed. students and debate competition on the topic, 'Observance of Vigilance Awareness Week can bring a Corruption Free Society' was conducted. J.K. Dwivedi, *Assistant Director (Law)* from North East Police Academy, Umshaw, Meghalaya, delivered on the theme of the year, 'Integrity – A Way of Life.'

Extension Lecture Series

Dr Dhruba Jyoti Borah, *Principal*, Fakhruddin Ali Ahmed Medical College and Hospital, Barpeta, Assam, delivered a lecture on 'Shankardeva and his times: His contribution to Assamese literature, art and culture' on 18 October, 2019 and Mihir Kanti Chaudhuri, an Indian Chemist of International repute and former *Vice-Chancellor* of Tezpur University, delivered a lecture on 'Worrying State of Science Education with specific reference to the North East: Current Scenario and Revamping Strategies.'

Celebration of Constitution Day

The NERIE, NCERT, Umiam, celebrated the Constitution Day on 26 November, 2019. All the Faculty members and Staff of the institute read out the Preamble to the Constitution of India followed by a Mock Parliament performed by the B.Ed. students of the institute. Nitesh Mozika, Advocate at High Court of Meghalaya, delivered a speech on Fundamental Duties. The students of Christ International School, Umiam also attended the programme along with all the faculty and staff of NERIE.

International Mother Language Day

The NERIE, Umiam, celebrated International Mother Language Day on 21 February, 2020. The speaker of the celebration Subodh Kumar Jha, *Associate Professor*, S.N. Sinha College, Jehanabad delivered on the theme 'Language without Borders'. The programme was attended by all the Faculty members and the students of NERIE.

Science Day Celebration

The NERIE celebrated the National Science Day on 28 February to mark the discovery of the Raman Effect by Indian physicist and Noble Laureate, Sir C.V. Raman. Mihir Kanti Chaudhuri, *Professor*, Indian Chemist of International repute and former *Vice-Chancellor* of Tezpur University and a recipient of Shanti Swarup Bhatnagar Award, delivered a lecture on 'Worrying state of science education with specific reference to the North East: Current scenario and revamping strategies'. The students organised a debate competition on the topic 'Climate change is a major risk to human beings' on 26 February, 2020.

Celebration of International Women's Day

NERIE, Umiam, celebrated the International Women's Day 2020 on 6 March, 2020. As part of the celebration, a Walkathon competition, a rally on awareness of gender equality, essay writing competition on the topic, 'The women who inspired me' and a talk on 'gender equality' were conducted.



DEMONSTRATION MULTIPURPOSE SCHOOLS

Students Enrolment in Demonstration Multipurpose Schools for the Session, 2019-20

S.No.	Class	Ajmer	Bhopal	Bhubaneswar	Mysuru
1.	Pre-primary	34	44	50	–
2.	I	35	70	70	69
3.	II	35	68	68	69
4.	III	34	70	69	70
5.	IV	34	69	70	70
6.	V	34	70	69	70
7.	VI	68	70	104	70
8.	VII	69	70	102	70
9.	VIII	68	70	101	69
10.	IX	70	66	102	70
11.	X	57	62	99	70
12.	XI	91	92	105	46
13.	XII	76	67	100	64
Total		705	818	1,109	807

Results of Board Examination, 2019-20

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	57/56	98.24	61/42	69	99/99	100	64/60	93.75
2.	XII Science	28/27	96.42	31/22	71	62/60	97	27/22	81.48
3.	XII Humanities/ Social Science	29/29	100	26/25	96	20/20	100	26/22	84.61
4.	XII Commerce	25/24	96	27/19	70	17/17	100		
5.	XII Vocational	–	–	07/04	77	–	–		



Major Achievements of the Demonstration Multipurpose School, Ajmer

- ❑ Certificate of merit which is awarded to the top 0.1 per cent performers in a subject in the CBSE Board examination was awarded to Asrar Ahmed of Class XII for scoring 100 out of 100 marks in Physical Education.
- ❑ To improve the communication skills of the students, the school organises various Inter-house Literary Competitions like debate, elocution, poetry recitation, quiz, drawing, essay-writing, spell-bee, etc., in English and Hindi languages. These competitions sharpen the talent of the students of the school in public speaking and make them self-reliant in all walks of life.
- ❑ The students of the school participated in 8th Science Awareness Exam, 2019–20 organised by Vigyan Bharti Ajaymeru in which Khushal Prajapati of Class X, Chetan Panwar of Class XI and Mohit Sunariwal of Class IX secured first, second and third positions respectively, in Hindi medium. Krishna Kumar Saini of Class X, Husna Khan of Class XI and Harsh Pandey of Class XI secured first, second and third positions respectively, in English medium.
- ❑ The students also participated in Mind Wars Daily Quiz Competition organised by ZEE TV channel in which Abhishek Dholpuria of Class IX secured first position in the month of June and Shakil Ahmed of Class VII won first position in the month of July.
- ❑ Celsius Institute, Ajmer conducted a Talent Search Exam among various schools in Ajmer in which 1,500 contestants participated. Chirag Chaudhary from Class VII achieved second position.
- ❑ The students secured top positions in star chef competition organised by Institute of Hotel Management and Culinary Studies, Jaipur. Tamanna Kanojiya of Class X–B secured first position. Kamakshi from Class XI–A stood second and Himanshi Sen of Class X–A notched the third place.
- ❑ In Science Exhibition, 2019 organised by DMS on 24 September, 2019 in Chemistry, Physics, Biology and Mathematics laboratories in which Vrinda of Class XI, Vanshika of Class XI and Tejaswi of Class XII secured first prize for exhibit ‘Petroleum gas burner’. Similarly, for exhibit ‘Spiro meter’ Saloni Sharma and Prithvi Jangir of Class XI and Krish Sankhla of Class XII achieved second prize.
- ❑ Samriddhi of Class IX secured third position in the drawing competition organised by DMS, Ajmer on 24 September, 2020.
- ❑ Students have shown their excellence in games and sports events during the INDEM organised by DMS, Bhubaneswar from 5 to 8 November, 2019 in which Tanu Priya of Class IX secured second position in 100 and 200 meter track event, Vishal Mahavar of Class XII got second position in long jump, Uday of Class XI–C achieved third position in 100 meter run, Himanshi of Class XII achieved third position in long jump, Inderjeet of Class XII got 3rd position in shot-put and Gaurav Khorwal of Class XII achieved third position in 800 meter run respectively.
- ❑ A group of 12 students participated and displayed their yoga skills during the inauguration ceremony of the National Yoga Olympiad held at NIE, NCERT, New Delhi on 18 June, 2019.



- ❑ A group of 11 students from Class IX participated in National Folk Dance and Role Play Competitions organised by the NCERT under National Population Education Project, at NIE, New Delhi. The team of DMS, Ajmer got first position in Folk Dance for which their theme was ‘Gender equality’.
- ❑ The school participated in Literature Festival at Maheshwari Public School, Ajmer. Students presented a Mime Play titled ‘*Andekhi Kahani*’ for which they secured third position.

Major Achievements of the Demonstration Multipurpose School, Bhopal

- ❑ R.K. Nayak, PGT (Physics) was awarded NCERT Teacher Incentive Award, 2018 by Honorable Human Resource Minister Ramesh Pokhriyal ‘Nishank’ on NCERT Foundation Day at NCERT, New Delhi for his academic contribution.
- ❑ The website of DMS, Bhopal www.dmsbhopal.edu.in was launched by H.K. Senapaty, Director, NCERT, New Delhi on 27 April, 2019. The main purpose of school website is to provide information to the students, parents and staff effectively and timely.
- ❑ An exhibition was organised for the students of secondary classes at DMS on 9 August, 2019. A total of 80 exhibits were presented by students.
- ❑ National Unity Day was organised at DMS, Bhopal on 31 October 2019 to commemorate the birth anniversary of Sri Sardar Vallabhbhai Patel. On this occasion, ‘Run for Unity’ was organised in DMS. Students and teachers participated in a short rally marathon around the Institute ground to evoke the spirit of integrity among the DMS fraternity. Essay writing competition was also organised on the occasion for the students of DMS.
- ❑ Forty-fourth Inter School Painting Competition was organised on 15 November, 2019 in DMS premises. Students of almost 21 schools participated in this competition. Participants were divided into four different categories and different topics were given to each group. Prizes were distributed to all the students after the competition.
- ❑ Students of Class IX of DMS, Bhopal secured third Position in the National Role Play competition organised at NIE, New Delhi
- ❑ Amber Jain of Class XI participated in a competition named ‘*Bapu Ke Prerak Prasang*’ held under *Gandhi Saptah* at Gandhi Bhavan on 2 October, 2019 and secured third position in the competition. He was awarded by the honorable Governor, Lalji Tandon, Government of Madhya Pradesh. He also participated in the debate competition held at Hindi Bhawan on 1 December, 2019 under ‘*Pratibha Protsahan Pratiyogita*’ by Rashtrabhasha Prachar Samiti, Bhopal and secured second position in the competition.
- ❑ Parmi Nagdeve of Class V bagged silver in Madhya Pradesh State Table Tennis Ranking Tournament 2019 held in Manas Bhavan, Bhopal.
- ❑ Yoga team of the school participated in the National Yoga Olympiad and secured third place under Junior Girls Category.
- ❑ Chandra Prakash, UDC represented Madhya Pradesh in Para-Badminton Tournament held in Rudrapur from 15 to 17 March, 2019.



Major Achievements of the Demonstration Multipurpose School, Bhubaneswar

During the year, the school conducted vocational awareness and skill development and science awareness programmes. In order to make the students physically fit the school is participating in FIT India project. The school participated in JNNSMME, 2019, *Kala Utsav* and National Role Play and Folk Dance Competition organised by the NCERT at New Delhi. The students actively participated in week long activities of *Swacchh Bharat Abhiyan*. The students of Class XI science participated in the prestigious INSPIRE programme of Department of Science and Technology, Government of India and girls of the school secured third prize in Innovation.

- ❑ Devanshi Kashyap, NCC Cadet of the school participated in Republic Day Parade 2020 at Rajpath, New Delhi.
- ❑ Pratyasha Ray of Class XII participated in National Level swimming competition organised by CBSE at Bhopal from 12 to 16 November, 2019. She obtained 4 gold medals one each in 50 m (back stroke), 100 m (back stroke), 200 m (back stroke), 50 m (butterfly) and 1 silver medal in 200 m (individual medley). She was also selected for 'Khelo India' programme which was held at Guwahati from 17 to 22 January, 2020 and won 3 silver medals one each in 50 m (back stroke), 100 m (back stroke) and 200 m (back stroke).

The school organised special assembly from 2 to 7 December, 2019 to commemorate 150th birth anniversary of Mahatma Gandhi. The school also undertook various activities during the year long observation of 150th year of Mahatma Gandhi's Birth. The activities include a mime act, *Sarv Dharm* prayer and physical drills. The school also participated in *Swachh Bharat Abhiyan*.

The school conducted several activities related to Fit India movement which includes: mass drill by the entire school during morning assembly; year long inter-house matches in the categories of boys and girls for all groups— junior, secondary and senior; friendly matches for students and staff in indigenous as well as other games; and oaths on fitness were taken in the morning assembly for all the students and staff.

Several talks were arranged for creating awareness among the students about road safety and traffic rules. The school took oath for compliance of traffic rules in the morning assembly on 25 November, 2019. DCP traffic, Shri Anoop Kumar Sahoo administered the oath and gave talk to the students.

The school has started the vocational programmes IT-ITes and Beauty and Wellness at secondary level on pilot basis under guidance of PSSCIVE, Bhopal.

Inter-Demonstration Schools Meet (INDEM) and DMS Science, Mathematics and Environment Exhibition

During the year, INDEM 2019 was organised at RIE, Bhubaneswar from 5 to 8 November, 2019. It was inaugurated by Shri Premananda Nayak, Honourable Minister, Skill Development and Technical Education, Government of Odisha. H.K. Senapaty, *Director*, NCERT was the Chief Guest in the valedictory function. During INDEM, the school also organised inter DMS Science, Mathematics and Environment exhibition 2019 in which students of different DM Schools presented their exhibits.



Major Achievements of the Demonstration Multipurpose School, Mysuru

- ❑ Senior Boys of DMS Mysuru participated in CBSE cluster Volleyball tournament 2019–20 held at Bengaluru and won bronze medal in the meet.
- ❑ DMS, Mysuru students participated in District level Dhyanchand Hockey trophy and won gold and silver medals in boys and girls categories.
- ❑ DMS, Mysuru students secured first and third position in national role play and folk dance competition held at NCERT, New Delhi.
- ❑ Ritu Chitti of Class XII Humanities participated and won gold in Karnataka State Wushu championship 2019 and represented National Wushu championship 2019.
- ❑ Khariksing Adonis Thangpu of Class XII won double gold in National Mountain Terrain Bike Championship 2020 and participated in Asian MTB Continental Championship Thailand 2020.





7. Major Schemes of MHRD Co-ordinated by the NCERT

The 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 or 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 2019–20, the Council implemented the following schemes.

Course Materials for MOOCs on SWAYAM (School MOOCs for Classes IX–XII and MOOCs for Teacher Education)

Massive Online Open Courses (MOOCs) on SWAYAM platform have been designed for students of Classes IX–XII as a supplement to their school teachings-learning. These courses are self-paced and are delivered through SWAYAM portal and Mobile App. A four-quadrant approach has been adopted in the course development process which intends to facilitate better learning and understanding of the subjects. Three cycles of MOOC by the NCERT on SWAYAM were successfully completed till March, 2019. Cycle 4 has been started with 21 courses, including 19 courses for students and two courses on Action Research in Educational Technology course for in-service teachers and Food Nutrition for Healthy Living course for teacher-educators and generic audience. A total of 7,293 learners were enrolled in these courses. Cycle 5 was started with 27 courses (22 student courses, 2 for teacher-educators and 3 generic courses) from 1 October, 2019 till 31 March, 2020. A total of 55,851 learners have been enrolled in these courses.

For development of online courses, 13 workshops were conducted for development of self-assessments; enrichment and review of scripts for school education courses: review of new content for new courses in School Education and Teacher education. The fourth meeting of the Academic Advisory Council (AAC) for MOOCs was conducted to review the report of NCERT MOOCs on SWAYAM (cycle 5th) and for the approval of new courses to be taken in 2020. The script committee meeting was organised in which total 133 scripts developed for NCERT MOOCs for various subjects were approved so as to proceed further for the video recordings. School visit for NCERT MOOCs advocacy campaign was done. Total 14 schools were visited by the MOOCs team members and interactions were held with 115 teachers and 1952 students for popularising the courses and obtaining feedback.

SWAYAM Prabha DTH Channel

The programme intends to telecast educational video programmes for learners of secondary and senior secondary students and teachers. From the bouquet of 32 channels of SWAYAM Prabha, the NCERT has been assigned Channel #31, 'Kishore Manch'. Five hundred and fifty-four episodes of daily live discussion programme were telecast on every working day from 11:30 am to 12:00 noon. Forty-eight live episodes were telecast on every Friday (Educational Administration) from 3:00 pm to 3:30 pm. Apart from this, 3,282 hours of contents were telecast on SWAYAM Prabha Channel #31 'Kishore Manch'. The viewership details of 'Kishore Manch' on various platforms were: Jio TV App – 7,86,637 users and 11,583 hours spent (April 2019 to March 2020), 'NCERT Official' YouTube Channel–3,90,58,440 views, e-Pathshala 'Kishore Manch' App: 4,760 App downloads, more than 6,00,000 YouTube views of live telecasts.

Mobile Apps and Digital Platforms (e-Pathshala and NROER)

The programme consists of various platforms or repositories for curation and dissemination of educational e-Content in various forms, i.e., audio, video and new media. e-Pathshala is a portal supported with an app where there are e-resources of the NCERT put up for use. The portal had 62,411,734 visitors, the app has a rating of 4.37 out of 5 on Google play store, 3 out of 5 on Apple store and 4.3 out of 5 on Windows Store. Till 31 March, 2020, 32,88,589 users downloaded the app from various play stores. Total views of e-Pathshala on Youtube have amounted to 42,160,612. Total number of files on YouTube: 3885. Uploading of digital textbooks of the NCERT (Reprint 20–21) of Classes I–XII in PDF, Flipbook and e-Pub Total books published on it as e-Pub are 696, while there are 504 Flipbooks. Seven States namely, Andhra Pradesh, Delhi, Haryana, Karnataka, Mizoram, Manipur and Uttar Pradesh have submitted 152 digitised textbooks. e-Pathshala on UMANG had 35,96,322 hits. Twelve books of vocational education are available on e-Pathshala app. e-Pathshala Scanner app was downloaded by 46,730 people. QR codes were generation for 368 textbooks of NCERT. Mapping of e-Contents with QR codes is in process for NCERT textbooks. The number of NCERT textbooks for which resource mapping is completed was 223. Metadata to enhance development and cleaning of e-Pathshala for the e-Resources: 2595 audio/video programmes were done for better search and accessibility on e-Pathshala.

The NROER is a repository of open educational resources which are free to access and use under the CC by SA license. During 2019–20, a large number of new e-Resources including e-books, audio-books, images, interactive, videos, video lectures, audios, etc., have been added taking the tally of resources from 13,558 in March 2019 to 18,000 by April 2020. Around 3125 QR coded e-Books have been added on the NROER platform and the older versions of the e-textbooks have been replaced. Around 5080 new resources including 1016 audios, 12 images, 62 videos, 836 interactive and 3154 documents have been added during the year to NROER platform. All the shared UNICEF e-Contents (around 315 resources) on NROER; instances for creating new partners on NROER, including UNICEF, Dragon Learn, SARD, RFlashino and DigiAbhays on NROER along with uploading of their content in different subject areas and adding of School Bhuvan App on NROER platform; wire frame have been developed for NROER version 2.0.; and 1500 curated e-resources have been shared with NROER team for uploading and testing on NROER version 2.0.



National ICT Award for School Teachers

The National ICT Award for School Teachers is an initiative to encourage and acknowledge the school teachers who have done exemplar works related to use of ICT in teaching and learning. National ICT Awards to School Teachers 2017 was conferred upon 43 selected teachers in an award ceremony held on 23 December, 2019 by Sri Sanjay Dhotre, Hon' able MoS, MHRD at Ambedkar Convention Centre, Delhi. The awardees also interacted with Hon'ble Minister of Human Resource Development (MHRD), Union Government of India, Dr Ramesh Pokhriyal 'Nishank'.

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 by the Central Institute of Educational Technology, every year. ICT *Mela* is held concurrently to showcase the innovations in use of ICT in education. The 24th AICEAVF and 4th ICT *Mela* was organised at CUSAT, Kochi, Kerala. For the festival, a total of 474 entries (Audio— 109, Video— 277, New Media/ICT— 88) were received under the categories of pre-primary and primary, upper primary, secondary and senior secondary from government organisations, individuals, teachers and children. These programmes were evaluated by special jury of experts who not only selected the best programmes under various categories but, also selected individuals for their excellence in making these programmes. Total 72 awards were distributed to winners in the form of cash prize, certificates and mementos. The 4th ICT *Mela* had 40 stalls with different Government, NGOs and Private organisations as well as National ICT Awardees showcasing their innovative ICT initiatives in education. The themes of stalls varied from e-Content, integration of ICT into pedagogy, mobile app, AI, AR, VR, Robotics, weather forecast and prediction, etc. All the exhibitors were felicitated with memento and certificate for participation.

Rashtriya Avishkar Saptah – 2019

Under the *Rashtriya Avishkar Abhiyan* (RAA), PAB programmes of MHRD, Government of India, a programme titled *Rashtriya Avishkar Saptah – 2019* was conducted by Department of Education in Science and Mathematics (DESM), with the objectives to develop interest, creativity, motivation among the students for the enhancement of knowledge, scientific investigation and understanding of scientific concepts, ensure students' involvement in understanding, exploration, innovation and sensitisation of some locally important problems by assigning significant projects on science and technology, etc. Keeping this in view, it was proposed that the mid of October, that is, from 14 to 21 October, 2019 to observe and to commemorate Late Dr A.P.J. Abdul Kalam's birth anniversary (15th October) as *Rashtriya Avishkar Saptah-2019* on the theme titled as 'Water Quality Assessment and Water Conservation'. It was envisaged that during the week, all students at secondary and higher secondary stages, from four to five schools of each block across the country, would uniformly carry out a study, involving experimentation, as per the guidelines developed and finalised in a national consultative meeting held at the NCERT, New Delhi on 17–18 October, 2019 with MHRD officials, senior functionaries of States/ UTs and RIEs RAA Nodal Officers. The guidelines were shared with all States



and UTs for implementation and were also made available on NCERT website. For sharing the results, photographs and newspaper clippings of the event conducted by schools with NCERT, provision was made for online collection of data or results via Google form. This year, 2600 schools from 1291 districts of different 22 States or UTs covering 1715 rural (66 per cent), 754 urban (29 per cent) and 131 semi-urban (5 per cent) have submitted their data or results of the study. The data have been analysed and the report has been submitted. It was seen that the schools participated in the programme very enthusiastically and the students learned about water quality assessment, rain water harvesting and water auditing.



Students are engaged in various activities related to 'Rashtriya Avishkar Saptah – 2019' on the theme 'Water quality assessment and water conservation'

National Talent Search Scheme

National Talent Search Scheme is a flagship programme of the NCERT which 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 4.1 per cent reservation for Children with Special Needs, which cuts across the caste categories. On the eve of 55th Foundation Day of NCERT Hon'ble HRM had announced to increase the number of scholarship from 1000 to 2000.

The state-wise numbers of qualified candidates of 2019 are given in the table.



State-wise List of Number of Qualified Candidate-2019

S.No.	State	Total
1.	Arunachal Pradesh	1
2.	Assam	4
3.	Manipur	1
4.	Meghalaya	2
5.	Mizoram	0
6.	Nagaland	1
7.	Sikkim	0
8.	Tripura	5
9.	Andaman and Nicobar Island	0
10.	Bihar	56
11.	Jharkhand	44
12.	Odisha	89
13.	West Bengal	103
14.	Chandigarh	13
15.	Delhi	113
16.	Jammu and Kashmir	8
17.	Haryana	146
18.	Himachal Pradesh	4
19.	Punjab	59
20.	Rajasthan	195
21.	Uttar Pradesh	159
22.	Uttarakhand	8
23.	Chhattisgarh	52
24.	Daman and Diu	0
25.	Dadra and Nagar Haveli	0
26.	Goa	1
27.	Gujarat	48
28.	Madhya Pradesh	117
29.	Maharashtra	262
30.	Andhra Pradesh	90
31.	Karnataka	181
32.	Kerala	69
33.	Lakshadweep	0
34.	Puducherry	3
35.	Tamil Nadu	200
36.	Telangana	67
Total		2,101

Note: Two candidates from out of India also qualified NTSE-2019.



National Population Education Project (NPEP)

The National Population Education Project (NPEP) was launched in 1980 and is housed in the Department of Education in Social Science (DESS) as an independent cell to promote population education and in 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/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.

NPEP Planning and Monitoring Meetings

Meetings were organised under NPEP to review the status of the activities planned by implementing agencies and to prepare the Annual Plan of Action of NPEP for the coming year. Annual PPR meeting under NPEP (27 February, to 1 March, 2020), one mid-term meeting (23–24 November, 2019), and one PFMC meeting were organised to review the status of project activities. In these meetings, officials from implementing States/UTs and RIEs participated. There is an institutional mechanism called Project Finance and Monitoring Committee (PFMC) to discuss and approve Plan of Action of NPEP.

Capacity Building Programme for Teachers of Central Tibetan Schools Administration (CTSA)

A capacity building programme was organised for primary teachers, work education teachers and music teachers at NIE, New Delhi from 13 to 23 May, 2019 by National Population Education Project Cell that focused on issues related to population education and adolescence education. 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 programme.





Activity during the life skill training programme for CTSA Teachers

Capacity Building Programme for National Resource Persons from States/UTs/RIEs on Research Methodology

The capacity building programme in research methodology was held at NIE, New Delhi from 1 to 5, July 2019. Sessions related to identification of research areas or concerns, literature review, conceptual framework, formation of objectives/hypothesis/research questions, tools/questionnaires, tryout, sampling techniques, statistical methods for data analysis including SPSS, report writing, etc., were covered in the programme.

S.No.	Title of the Programme	Venue and Dates
1.	Capacity Building Programme for Primary Teachers, Work Education Teachers and Music Teachers, TGTs and PGTs from Central Tibetan Schools Administration (CTSA)	NIE, New Delhi 13–23 May, 2019
2.	Capacity Building Programme for National Resource Persons from States/UTs/RIEs on Research Methodology	NIE, New Delhi 1–5 July, 2019

Interactive Workshop with SCERTs or SIEs for Implementation of National Action Plan for Drug Demand Reduction

A two-day Interactive workshop was jointly organised with National Institute of Social Defence (NISD) at NIE, New Delhi on 2 August, 2019. The programme was conducted on the role of SCERTs or 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 or adolescents in different States or UTs under National Action Plan for Drug Demand Reduction (NAPDDR).

A Study of Emotional and Behavioural Problems of Adolescents

This research was taken up under NPEP. The data have been collected from the secondary school students of Assam, Meghalaya and Sikkim. Questionnaires



on various emotional and behavioural aspects of students, interviews with school children, to identify vulnerability to addiction were used for the study. Preliminary results show that a large number of adolescents are at-risk for substance abuse. The out-of-school children are especially vulnerable and have little information about substance abuse.

Curriculum, Facilitator Guide, Training and Resource Material and Activity Book on Health and Wellness of School-going Children

The four materials developed for School Health Programme (SHP) under *Ayushman Bharat* to foster the growth and development of school-going children by promoting their health and wellness are: Curriculum on Health and Wellness of School-going Adolescents; Facilitator Guide for School Health Programme; Training and Resource Material: Health and Wellness of School-going Children; and Activity Book for Students: Under the aegis of School Health Programme of *Ayushman Bharat*.

The Ministry of Human Resources Development in partnership with the Ministry of Health and Family Welfare launched the School Health Ambassador Initiative on 12 February, 2020. Union Minister of Human Resource Development; Dr Ramesh Pokhriyal ‘Nishank’ and Union Minister of Health and Family Welfare, Dr Harsh Vardhan jointly released Curriculum, Facilitator Guide, Training and Resource Material and Activity Book for School Health Ambassador Initiative under *Ayushman Bharat* in the presence of Minister of State Shri Ashwini Kumar Choubey. Ms Preeti Sudan, *Secretary*, Health and Family Welfare; Hrushikesh Senapaty, *Director*, NCERT; along with officials of the Ministry of the Human Resource Development, Ministry of Health and Family Welfare and representatives from the developmental partners were also present during the inauguration ceremony.

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. The initiative will be linked with other government initiatives such as the Eat Right Campaign, Fit India Movement and *Poshan Abhiyaan* for the overall development of children’s health.

A Documentary on Substance Abuse

It was developed under the NPEP for sensitisation on the various aspects of addiction. Interviews from experts as well as an interview of the personal experiences of one former drug user were included to highlight the consequences of substance abuse. The documentary would be screened during training and sensitisation programmes on adolescent education.

National Role Play Competition

The National Role Play competition is being organised since 2009 for Class IX students of government schools of States/UTs. Nutritious Food and Well-being, Personal Safety (physical, mental, emotional and sexual) Prevention of Drug



or Substance Abuse, and Safe use of Internet, Gadgets and Media Literacy are major themes of the event. The competition is organised at five levels, i.e., school, block, district and State/UTs level and national level. National level role play competition was organised by NPEP Cell at NIE, New Delhi from 3 to 6 December, 2019. Students from schools of 26 States/Union Territories and 4 RIEs of NCERT participated at national level role play competition. Role Play Competition was organised in 372 districts across the country in 2019.

Winners: Delhi— First, Kerala— Second, Chandigarh—Third

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, co-ordination, strength, and endurance among the participants as well as the audiences.

The National Folk Dance Competition was organised from 3–6 December, 2019 at NIE, New Delhi. Equal opportunity for boys and girls: Removal of Female Feticide, Respect and Care for Elders, Protection of Environment, Prevention of Drug Abuse and Charms and Challenges of Adolescents were major themes of National folk dance competition. Students from schools of 24 States/Union Territories and 4 RIEs of NCERT participated at national level folk dance competition. Folk Dance competition was organised in 365 districts across the country in 2019 in which Assam got first prize, Bihar second prize and Rajasthan stood third.

Curriculum and Course-ware for Pre-vocational and Beauty and Wellness Programme and Establishment of Laboratory in Demonstration Multipurpose School (DMS)

The objectives of the programme were to refine curricula and course-ware for Pre-vocational programme and Beauty and Wellness programme from Classes IX to XII and to establish a laboratory for Pre-vocational and Beauty and Wellness programme. The draft curriculum and textbook of Class VI of Pre-vocational Education have been developed. The curriculum of Beauty and Wellness for Classes IX and X (Secondary) and Classes XI and XII (Senior Secondary) were also developed by RIE, Bhopal in collaboration with South Korean experts. The Beauty and Wellness Lab has been established in DMS, Bhopal by RIE, Bhopal.

Innovative Model of Vocational Education in Schools

The project was initiated in 2018–19 and continued for the current financial year 2019–20. Under the scheme, 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 have been selected to set up a model 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 or institutions for training and additional learning hours for practical or skill development. Under the project, vocational labs have been set up and appointment of vocational teachers has been made during 2019–20.



Teachers’ Self-Assessment Rubrics and Mobile App

The draft guidelines along with tool for assessing the performance of teachers titled ‘Teachers’ Self-Assessment Rubrics (TSAR)’ has been developed. An initial draft of guidelines along with tool has been developed through a series of expert workshop and in house meetings. The group of experts has prepared the draft tool with 41 performance indicators and descriptors for each of the items. A small scale piloting workshop was conducted in which 24 teachers from primary to senior secondary level had been participated. Further, it was tried out among the teachers from State board schools, KVS, NVS, DMS and private schools. The feedback in the form of comments and suggestions received during the piloting workshop and try-out were used for improving the guidelines and rubric.

In continuation with this, three regional consultative-cum-sharing workshops were organised with States/UTs to share the draft ‘Teacher Performance Assessment Guidelines and Rubric’ with stakeholders. Based on the suggestions or comments and feedback provided by the participants, the guidelines and the tool was finalised. The final TSAR is available on the NCERT website and the mobile app is in the final stage of launching.

Ek Bharat Shreshth Bharat — Bhasha Sangam

India is a multilingual country and to keep the multilingual identity of India a programme titled as, *Bhasha Sangam* is conceptualised under the broader idea of *Ek Bharat Shreshth Bharat*. *Bhasha Sangam* recognises the unique symphony of languages of our country, and strives for unity in diversity. The objectives of the *Bhasha Sangam* are to introduce school students to all the 22 Indian Languages of Schedule VIII of the Constitution of India and to enhance linguistic harmony and respect, and promote national integration. This programme will be run by the Departments of School Education in States or UTs. Short dialogues consisting of about 100 simple, commonly used sentences have been designed by the NCERT in 22 languages for use by students of all classes. The dialogues are based on the themes relevant to the students which are categorised in 12 areas viz., environment, family, society, language and cultural exchange national integration, etc. The dialogues have been presented in Roman script, in *Devnagari* script, hindi translation and english translation.

Kala Utsav

Kala Utsav, 2019 was held at Regional Institute of Education, Bhopal, Madhya Pradesh from 2 to 5 January, 2020. Students from 36 States/UTs, KVS and NVS participated in the programme. The *Utsav* was inaugurated by Ms Changsan, *Joint Secretary*, SE&L, MHRD, Ms Rashmi Arun Shami, *Principal Secretary*, Education, Madhya Pradesh and Hrushikesh Senapaty, *Director*, NCERT on 2 January, 2020. The competitions were held in four different categories namely, music (vocal), music (instrumental), dance, and painting. In each category there were two teams; one male and one female. All performances were solo in nature. The *Utsav* had special entries on theatrical abilities of





four teams of 42 students from Demonstration Multipurpose Schools (DMS) of RIE, NCERT. Theater entries focused on The life of Mahatma, commemorating 150th Anniversary of Mahatma Gandhi.

All participants were taken on visit to the world heritage site after the competitions. There was open house discussion followed by the community dance which was joined by all students, escorts, jury and organising team of NCERT and MHRD. It gave an *Ek Bharat Shreshth Bharat* experience for all involved. These moments of cultural get-togetherness resulted in four hundred plus diaries written by students supported with beautiful colour drawings on their pairing state. The students were facilitated by the NCERT/MHRD team to explore the available diversity to the best extent possible. The diaries were presented to Shri Amit Khare, *Secretary*, Education, DSE&L, MHRD, who was the chief guest for the valedictory function which was held on 5 January, 2020. The winners of *Kala Utsav* were awarded with medals and trophies.





Winners of Kala Utsav 2019

Art Form/ Category	First	Second	Third
Music— Vocal (Female)	Khushi Udampur, Jammu and Kashmir	Tapasya Debnath Agartala, Tripura	Varsha Basak, Varanasi, Uttar Pradesh
Music— Vocal (Male)	Saqib Ahad, Bandipora, Jammu and Kashmir	Vaishnav Nikul Kishorbhai, Surendranagar, Gujarat	Atharva Onkar Vairagkar, Nashik, Maharashtra
Music— Instrumental (Female)	Rama V. Shenvi, Bambolim, Goa	Akshita Srivastav, Dwarka, New Delhi	Amirthavarshini, Thiruvapur, Tamil Nadu
Music— Instrumental (Male)	H. Vishwas, Chennai, Tamil Nadu	K. Karthikeya, Andhra Pradesh	Siddhant, Bhopal, Madhya Pradesh
Dance (Female)	Sreeganga N.K., Kadamboor, Kerala	Kheyali Mondal, South 24 Parganas, West Bengal	Sunaina (Pirthipal), Hoshiarpur, Punjab
Dance (Male)	Sayan Sarkar Itahar, Uttar Dinajpur, West Bengal	Chinmaya Kumar, Das Cuttack, Odisha	Giridharan S., Vanarapet, Puducherry
Painting (Female)	Sneha Pal, Salt Lake, Kolkata	Anita Sharma, Ujjain, Madhya Pradesh	Neha A.S., Kozhikkode, Kerala
Painting (Male)	S. Vasanth Trichy, Tamil Nadu	Alapan Saha, Chandernagore, West Bengal	Ritik Pahariya, Raipur, Chhattisgarh

Yoga Olympiad 2019

Yoga Olympiad is organised to generate awareness about the benefits of Yoga on holistic health and developments of healthy habits. During the Yoga Olympiad,



Yogic practices like *Asanas*, *Pranayama*, *Kriya* (cleaning) and Meditation were performed by the students.

International Day of Yoga is celebrated annually on 21 June since its inception in 2015. Yoga Olympiad, a national level event culminates with the participation of children after performing at the block, district and state levels.

The valedictory function of National Yoga Olympiad was held on 20 June, 2019 in the auditorium of All India Council for Technical Education (AICTE), Nelson Mandela Marg, New Delhi. The Chief Guest for the valedictory function was Smt Rina Ray (IAS), *Secretary*, Department of School Education and Literacy, MHRD, Government of India. Students from various States/UTs and RIEs performed as a group together in the valedictory function. There were yoga performances by selected boys and girls. Five hundred and sixty-seven students from 32 States or UTs were participated in the programme.





8. Visitors to the NCERT and Foreign Visits by the NCERT Faculty

The National Council of Educational Research and Training (NCERT) 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 when 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 co-operation.

The International Relations Division co-ordinates the visit of foreign delegates and Public Relations Unit of NCERT co-ordinate the visit of persons from national organisations and institutions.

Visits by Delegations and Experts from Various Countries

- ❑ A team comprising of our officials from Ministry of Education, Federal Democratic Republic of Ethiopia including the Director of its Curriculum Division in collaboration with UNICEF, Ethiopia visited NCERT from 12–19 April, 2019. The objective of this visit was to exchange ideas and experiences in the areas of curriculum development, assessment and teacher education including the development of curricular materials. The visit was facilitated by UNICEF.
- ❑ Ms Mi-jung Son, *First Secretary* in the Embassy of the Republic of Korea, New Delhi visited NCERT on 9 May, 2019 to discuss progress made under various provisions of the MoU signed between NCERT and AKS.
- ❑ Ms Nelli Mikkola, *Second Secretary* in the Embassy of Finland in New Delhi, visited NCERT on 31 May, 2019. During this visit, she met *Director*, NCERT along with *Head*, IRD and discussed about possible future collaboration between NCERT and Finland Ministry of Education in the field of School Education.



Visit of delegates from Ministry of Education, Federal Democratic Republic of Ethiopia

- ❑ Dr Rekha Koul, *Dean (International)*, Curtin University, Australia visited NCERT on 6 September, 2019. In her meeting with Hrushikesh Senapaty, *Director*, NCERT, Amarendra Behera, *Joint Director*, CIET, Prof Pratyusa Kumar Mandal, *Head*, IRD and Ranjana Arora, *Head*, DCS issues of mutual co-operation between the two institutions were discussed.
- ❑ Ms Roberta Lima, *Head of the Cultural Educational Affairs* from the Embassy of the Brazil, visited CIET, NCERT on 9 October, 2019 and discussed the issues related to the process of curriculum and textbook development, teaching-learning process in schools and student learning assessment.
- ❑ Ms Son Mi Jung, *First Secretary (Political)*, Embassy of the Republic of Korea, visited NCERT on 18 November, 2019 and 13 December, 2019 to finalise the details of the Joint Working Committee Meeting at NIE and RIE, Bhopal from 16 to 22 December, 2019.
- ❑ Florida State University Research Foundation (FSURF), Florida State University (FSU), USA and the College of Education (CE), University of St. Francis (USF), USA visited NIE and had discussions with faculty of DEE



Delegation from USA interacting with Director and Faculty of NCERT



and ESD. They also visited Kendriya Vidyalaya, R.K. Puram, New Delhi. The team had discussion with teacher-educators at RIE, Bhubaneswar and interacted with D.M. School teachers from 6 to 10 January, 2020. The post-visit concluding discussions with *Director*, NCERT and NIE faculty focussed on reading intervention and research, future collaborations and finalising the MoU.

- ❑ Taiwan delegation visited NCERT from 6 to 10 January, 2020. The *Joint Director*, CIET, organised the two-day meeting and discussions were held with NIE faculty on the use of technology in education.



Korean Delegates interacting with Hrushikesh Senapaty, Director, NCERT

- ❑ Korean delegation visited NCERT and RIE, Bhopal from 6 to 10 January, 2020. A debriefing meeting was held on 10 January and chaired by the *Director*, NCERT. The team shared their current role in finalising the syllabus for promoting vocational education in the country.
- ❑ Mechatronics team from KRIVET and KOICA, Republic of Korea, visited NCERT and had preliminary discussions on 15 January, 2020 on NCERT's efforts to promote Vocational Education as per *NEP 2019* (then in draft form) policy provisions at the school level. This meeting was chaired by the *Director*, NCERT. The team visited PSSCIVE, Bhopal and had discussion with Rajesh Khambayat, *Joint Director* on 15–16 January, 2020 to finalise TVET Policy, Mechatronics Curriculum and Quality Assurance. A debriefing meeting chaired by *Director*, NCERT at NIE, New Delhi was held on 17 January, 2020 and plans were formulated for promoting vocational education as per MoU.
- ❑ A meeting was held with a group of experts in pedagogy and assessment from United Kingdom along with CBSE officials on 2 March, 2020. Discussions were held on assessment and curriculum design and existing educational and assessment practices which was chaired by the *Director*, NCERT.
- ❑ A delegation from the Australian High Commission in New Delhi had a meeting with Director and faculty of NCERT on 3 March, 2020 in the Director's chamber, first floor, Zakir Hussain Block, NCERT. The three members from the Australian High Commission were Mr Brett Galt-Smith, Counsellor, Education and Research, Australian High Commission, Ms Lyndal Corbett, *First Secretary*, Education and Research, Australian High



Commission and Ms Anu Jain, *Senior Advisor*, Education and Research, Australian High Commission. The meeting focused on how to proceed on the provisions of the MoU signed between NCERT and Curtin University (CU), Australia and collaborate with a particular focus on undertaking research, designing customised curriculum and training modules for in-service teacher training of elementary, secondary teachers and teacher-educators.



Delegates from the Australian High Commission receiving NISHTHA module from the Director, NCERT

Consulting Seminar

A team of experts from Korea Research Institute for Vocational Education and Training (KRIVET) visited NCERT and RIE/PSSCIVE, Bhopal in connection with the Indian Vocational Education–2019, First Consulting Seminar. The team arrived on 1 August, 2019 en-route to Bhopal and returned to NIE on 8 August, 2019 on their way back to Seoul, RoK. A debriefing meeting, chaired by the Director, NCERT was organised on 8 August, 2019 at NIE, New Delhi to discuss issues related to further collaboration.

Annual JWC Meeting

The annual meeting of the AKS-NCERT JWC was held in NCERT from 18 to 22 December, 2019. It was organised by the International Relations Division and the Academy of Korean Studies (AKS), Seoul in collaboration with the Embassy of the Republic of Korea, New Delhi.



Annual meeting of the AKS-NCERT



Foreign Visits by the NCERT Faculty

- ❑ Amarendra P. Behera, *Joint Director*, CIET participated as an invitee in the international conference organised by World reader on Digital Reading Summit-2019 at Nairobi, Kenya from 6 to 10 May, 2019.
- ❑ Amarendra P. Behera, *Joint Director*, CIET was invited as a delegate in the meeting on Research and Training in Educational Technology (ET) and ICTs in Education and Learning organised by National Central University, Taiwan from 24 to 30 June, 2019. The objective of the meeting was to explore the possibilities of collaboration on ET between National Central University, Taiwan and NCERT, New Delhi.
- ❑ Rajendra Pal, *Head* of Media Production Division, CIET, visited Sukhothai Thammathirat Open University in Thailand and presented the paper titled, 'Factors Affecting Students' Academic Performance during Examinations: A Study of Live Helpline. He received the best paper award in this UNESCO-sponsored International Conference on Distance Learning (STOU Conference, 2019).
- ❑ Dr Angel Ratnabai S., *Assistant Professor*, CIET, participated in the Workshop for Indian Educators of NCERT at Korean Education Research and Information Service (KERIS), as part of the collaborative workshop between NCERT and Academy of Korean Studies organised at Seoul, South Korea from 16 to 20 September, 2019.
- ❑ A two-member delegation comprising Pratyusa Kumar Mandal, *Head*, IRD and Ranjana Arora, *Head*, DCS went to Australia from 25 July to 2 August, 2019 to study the Australian curriculum for school education.
- ❑ A four-member delegation comprising Pratyusa Kumar Mandal, *Head*, IRD and Anupam Ahuja, *Assistant Professor*, DEGSN, Shankar Sharan, *Professor*, DESS and Angel Ratnabai, CIET visited South Korea from 16 to 20 September, 2019 to participate in meetings and hold discussions on the on-going collaborative projects between NCERT and Academy of Korean Studies (AKS) under the provisions of the MoU signed between the two institutions.
- ❑ Anita Julka, *Professor*, DEGSN, visited Taiwan to study the programmes of Research Center for Science and Technology for Learning at National Central University to advance academic collaboration in learning technology from 24 to 30 June, 2019. The center has been playing a leading role in the development of new learning technologies and has initiated several transformative models of teaching and learning at both university and national level. The objective of the visit was to broaden the impact of the educational technology on education in both India and Taiwan through the collaboration between NCERT and the centre. During the visit, meetings were also arranged with Ministry of Education, Taiwan City, National Chiao Tung University, Hsinchu, Taiwan, and National Taiwan Normal University (NTNU), Taipei (outcome of the meetings).
- ❑ Gouri Srivastava, *Head*, DESS conducted a Training Workshop on Review and Analysis of School Textbooks on Gender-Sensitiveness, Republican Education Center, Tashkent, Uzbekistan on 24–25 October, 2019.



- ❑ Aparna Pandey, *Professor*, presented the paper Geography Learning among school students in tribal areas of India, Recontextualising Geography in the IGU-CGE International Conference, Institute of Education, London, University College London from 15 to 17 April, 2019.
- ❑ Poonam Agrawal, *Professor* and Mona Yadav, *Professor*, visited the Republic of Korea from 11 to 18 May, 2019 under a Korea Foundation funded project titled, 'Policies on Education and Skill Development for Empowerment of Girls: A Comparative Study of India and Korea'. The faculty also visited the Korean Women's Development Institute (KWDI) and the Korea Research Institute for Vocational Education and Training (KRIVET) and held interactions. The discussion made and the material collected during the visit will help in analysing the relevant policies or 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.

- ❑ P.D. Subhash, *Associate Professor*, PMD, attended the 19th Asia Pacific Training Workshop on Education for International understanding organised by Asia-Pacific Centre for Education for International Understanding (APCEIU), sponsored by the Ministry of Education of the Republic of Korea at Seoul and Inje. The Asia Pacific Training Workshop held from 20 to 28 June, 2019 comprised of interactive lectures, discussions, field visits and informal dialogues facilitated by international experts in GCED. The workshop provided the participants with the opportunities to learn about GCED and share their opinions on multiple issues pertaining to education for peace and global citizenship.



Discussion during 19th Asia Pacific training workshop held in Seoul and Inje, South Korea



Interacting with students during the visit to the schools of Republic of Korea

- ❑ Ashita Raveendran, *Associate Professor*, PMD attended the 4th Global Capacity Building Workshop on GCED organised by the Asia-Pacific Centre for Education for International Understanding (APCEIU) from 25 August to 7 September, 2019 at Seoul, the Republic of Korea. During the two-week intensive workshop Ashita attended sessions on global citizenship that helped in acquiring of skills to design and implement GCED programmes and establish the global and regional networks with teacher-educators from





Educators from various countries attending the 4th Global Capacity-Building Workshop on GCED

the UNESCO member countries and institutions. As part of the workshop, she also participated in the International Conference on GCED (3–4 September, 2019), an annual conference on GCED organised by APCEIU and UNESCO. She was also involved in the process of designing GCED programmes and action plans which were demonstrated to the participants in the workshop. During the school visit, she interacted with the academic staff and students which gave insights to the school curriculum in the Republic of Korea.

Visitors from Indian Institutions or Organisations to the NCERT

Students, teachers and faculty members, from different educational institutions visited LDD as part of their educational tour including participants of different training programmes or refreshers courses organised by different departments of NCERT. They were sensitised about the library hours, resources, services, various kinds of library membership borrowing facilities, etc.

- ❑ A group of 66 students and faculty members from Department of Education Integral University, Lucknow visited LDD on 1 April, 2019.
- ❑ A group of 15 community students and faculty members from Pathpardarshak Welfare Society, Govind Puri, Kalkaji visited LDD on 9 July, 2019.
- ❑ A group of 16 D.El.Ed. Students of DIET, Moti Bagh, Delhi visited LDD on 18 February, 2020.
- ❑ A group of seven Sr. Lecturer of DIET, Kumta, Uttarkanada, Karnataka visited LDD on 3 March, 2020.
- ❑ A group of 103 students and lecturers of Awadh Centre of Education, Institute of Vocational studies, Sheikh Sarai, Delhi visited LDD on 4 March, 2020.

Student teachers from various Teacher Education Institutions visited NCERT to know about the role and functions of the NCERT as per the following details:



- ❑ M.Ed. Student-teachers from Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeeth (SLBSRSV) visited NCERT during their internship on 9 October, 2019.
- ❑ B.Ed. Student-teachers from Gautam Buddha University, Greater Noida, visited NCERT on 6 November, 2019.
- ❑ B.Ed., M.Ed. student-teachers from Rajendra College, Balangir, Odisha, visited NCERT on 2 March, 2020.
- ❑ A group of 42 B.Ed. M.Ed. students from Rajendra College, Balangin, Odisha, visited LDD on 4 March, 2020.
- ❑ Trainees of M.Ed. (Inclusive Education) of RIE, Bhopal, visited DEGSN, NCERT from 25 to 29 November, 2019.





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 2019–20
- ❑ **Appendix V**
NCERT's Consolidated Sanctioned Strength of Posts as on 31 March, 2020 and Reservation Position
- ❑ **Appendix VI**
Receipts and Payments Account for the year ended 31 March, 2020
- ❑ **Appendix VII**
Publications Released during the year 2019–20
- ❑ **Appendix VIII**
Publications 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. 2020. Learning Strands Framework: Empowering Prospective Science Teachers to Generate Students' Interest and Curiosity in Science. In Masih, A., Bhatia, H.K., and Ahmad, A.I. (Eds.), *Teacher Education the Changing Landscape*. pp 101–113. VL Media Solutions, New Delhi.
- _____. 2019. Challenges of Science Education in India and Future Direction. Panelist in the National Seminar on *Science Education*. NERIE, Umiam. pp 14–15. November.
- _____. 2020. Learning Strands Framework: Empowering Prospective Science Teachers to Generate Students' Interest and Curiosity in Science. Paper presented in the *International Conference on Changing Landscape of Teacher Education (ICCLTE)*. Jamia Millia Islamia, New Delhi. 4–5 March.
- _____. 2020. Students' View on Difficulties in Conceptual Understanding of Science at Secondary Stage. Paper presented in the international conference on *Education in Mathematics, Science and Technology (ICEMST)*. Istanbul, Turkey. 21–24 March.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)

Research Papers and Articles

- SINGH, V.K. 2019. Prarambhik Star Par Vidyalayon mein Samaveshi Shiksha ke Samvardhan mein Vidyalay Prabandhan Samiti ki Bhumika. *Gyan Garima Sindhu*. 62. pp. 93–103.
- SINGH, V.K., AND CHAUHAN, S.C. 2019. Issues and Challenges in Implementation of Inclusive Education in Kasturba Gandhi Balika Vidyalayas in Madhya Pradesh State of India: Case Studies. *Parichay: Maharaja Surajmal Institute Journal of Applied Research*. 2(2). pp. 1–6.
- _____. 2020. Education of Socially Disadvantaged Girls with Disabilities in Kasturba Gandhi Balika Vidyalayas of Gujarat: A Qualitative Study. *Gitarattan Journal of Education*. 2(2). pp. 1–25.
- BHARTI. 2019. Inclusive Education Good Practices Across States and UT's in India. *Srias—Priorities in Quality Education. E-newsletter*. 2. p. 6.
- BHARTI, K.M., MANOJ, AND GOEL, S. 2019. FOSS in Education—Study of Opinion of Students, Pre-service Teachers and In-service Teachers. *Jamshedpur Research Review*. 4 (35), <http://jamshedpurresearchreview.com>.
- BHARTI AND UPADHAYAY, C. 2019. Teacher Education for Addressing Diverse Needs in English Classroom. *The Signage*. 7(1). pp. 29–41.



Book Chapters

JULKA, A. 2019. Curricular Adaptation and Pedagogy. In Dalmia, A., Mittal, S.R., Mittal, A.K., and Jacob (Eds.), *Visual Disability: A Resource Book for Teachers. Part 2.* (pp. 105–123). National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun.

_____. 2019 Parents' Concerns and Issues for Inclusion. In Dalmia, A., Mittal, S.R., Mittal, A.K., and Jacob (Eds.), *Visual Disability : A Resource Book for Teachers, Part 2.* (pp. 289–312). National Institute for the Empowerment of Persons with Visual Disabilities, Dehradun.

Paper Presentations

JULKA, A. 2020. Access and Engagement in Education. Paper presented in the national conference on *Addressing Environmental Barriers and Universal Design.* SNDT University, Mumbai. 27 February.

_____. 2019. Curriculum Adaptations for Inclusive Classrooms. Paper presented in the national conference on *Education of PWD: Reality, Reflection and Reforms.* Chandigarh College of Education, Mohali. 11–12 April.

_____. 2020. Curricular Accessibility for PWD: Access and Engagement in Education. Chaired the session in the national conference on *Addressing Environmental Barriers and Universal Design.* SNDT University, Mumbai. 27 February.

SINGH, V.K. 2019. Evidences of Effective Partnerships with Organisations. Paper presented in the national conference on *Professional Policy Making: Implementation of Inclusive Education.* NIEPA, New Delhi. 17 August.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION (DEPFE)**Research Papers and Articles**

MISHRA, P.K. AND V., GAIROLA. 2019. An Overview of School Climate and Student Outcomes in the Indian Context. *Anweshan: Journal of Education.* X(1). pp. 33–49.

DEPARTMENT OF TEACHER EDUCATION (DTE)**Research Papers and Articles**

PATEL, M.S. 2019. Education for Socio-economic Development in Changing Competitive World. *International Journal of Education Humanities and Social Science.* 2(6). pp. 8–21.

PATEL, M.S., P SINGH AND MONIKA, MISHRA. 2019. Professional Development of In-service Teachers in India: Issues and the way forward. *International Journal of Humanities and Social Sciences.* 8(2). 26–37.

PATEL, M.S., AND SINGH, P. 2019. Redefining Teacher Education in India. *International Journal of English Language, Literature in Humanities.* 7(11). pp. 250–264.

PATEL, M.S. AND PARUL, S. 2019. Issues and Concerns in Pre-primary Teacher Education Programmes in India. *Journal of Emerging Technologies and Innovative Research.* 6(1). pp. 371–377.



- VIJAYAN, K., AND SHARMA, P. (IN PRESS). School Internship Programme: An Analytical Review. *Journal of Indian Education*. 3(4).
- SINHA, S. AND KUMAR, D. 2020. Secondary Education in Nagaland: An Overview. *International Journal of Advance Research and Innovative Ideas in Education*. 5(2). pp. 3260–3270.
- _____. 2020. Achieving Science Learning Outcomes at Secondary Stage Learning Information and Communication Technology. *International Education and Research Journal*. 6(3). pp. 60–63.
- _____. 2020. Nurturing School Leadership. Panelist in the National Conference on School Leadership Practices. DTE, NCERT, New Delhi. 26–28 February.
- PATIDAR, J.K. (IN PRESS). Shodha ka Pratham Charan— Ek Gunatmak Shodha Prastav. *Bhartiya Adhunik Shiksha*. 1(40).
- ARORA, R. 2020. Quality Education, Training and Lifelong Learning for Women. Panelist in the National Consultation *Moving towards Generational Equality: Realising Women’s Rights for an Equal Future in Association with UN Women*, National Commission for Women, New Delhi. 31 January.
- BHARDWAJ, B.P. 2019. Yoga and Values in Indian Education System: A Review of Existing Policies and Future Possibilities in School Education System. Invited speaker in the national seminar on *Yoga and Values in Indian Education System: A Review and Forward Path*. Kaivalyadhama, Lonavla, Maharashtra. 11–12 October.
- _____. 2020. Distributed Leadership: Implications for the Role of the Principal. Chaired the Session in the National Conference on *School Leadership Practices*, DTE, NCERT. 26–28 February.
- VIJAYAN, K. 2019. Anti-plagiarism and Ethics in Academic Writing. Paper Presented in the National Seminar on *Intellectual Property Rights*, Government Brennen College. Thalassery, Kerala. 16–17 October.
- PATIDAR, J.K. 2020. Netratvak Alokatantrik Swarup-Ek Anubhav. Paper Presented in the National Conference on *School Leadership Practices*. DTE, NCERT, New Delhi. 26–28 February.

DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

Research Papers and Articles

- SONI, R. 2019. Learning through Interest Areas at the Preschool Stage— An Interactive and Innovative Approach. *Proceeding of the two-day International Conference on Quality Teacher Education Vis-à-vis School Education*. Department of Education. Osmania University, Hyderabad. 2(4). pp. 179–184.
- SANGAI, S. 2019. Family Engagement in the Early Years. *Navtika— Journal of Early Childhood Care and Education*. 9(4). pp. 33–35.
- _____. IN PRESS. Multigrade Teaching—Challenges and Opportunities. *Journal of Indian Education*. 44(4). pp. 27–33.
- _____. 2019. Action Research for Sustainable Human Resource Development in ECE. *Navtika— Journal of Early Childhood Care and Education*. X(2). pp. 29–32.



Book Chapters

- NIKALJE, V.M. 2019. The Silk Route through the Lens of Children's Literature. In Khan, Nasir Raza (Ed.). *India and the Silk Road*. pp. 203–222. Delhi: Primus Books.
- SANGAI, SANDHYA. 2019. Managing Teaching Learning in Primary Level Multigrade Schools Teachers' Challenge. In Masih, Aejaz., Bhatia, Harjeet Kaur, and Ahmad, Arshad Ikram (Eds.). *Teacher Education— The Challenging Landscape*. pp. 140–49. VL Media Solutions, New Delhi.

Paper Presentations

- NIKALJE, V.M. 2019. The Portrayal of Disabilities in Children's Literature: Exclusion and Inclusion. Paper Presented in the 10th international CESI conference on *Exclusion, Inclusion and Equity in Education*. Zakir Husain Centre for Educational Studies (ZHCES), JNU. 9–11 December.
- SONI, R. 2019. Supporting Meaningful Play in Interest Areas at the Pre-school. Poster presented in the international conference on *ECCE*, UNESCO Russia, Moscow, Russia. 30 May–1 June.
- _____. 2019. Language Learning and Early Literacy— Building Capacity of Pre-school Teachers. Paper Presented in the national conference on *Language Pedagogy* at RIE, Ajmer. 11–13 December.
- _____. 2020. Improving Learning Outcomes in Early Years Mathematics using Innovative Pedagogical Practices. Paper presented in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.
- _____. 2020. Quality Pre-school Education—An Entitlement for Every Child. Paper presented in the international conference on *Education in the Twenty First Century*. RIE, Bhubaneswar. 21–23 February.
- _____. 2020. Critical Issues of Teacher Preparation for Pre-school Education. Paper presented in the international conference on *Changing Landscape of Teacher Education*. Faculty of Education, Jamia Millia Islamia, New Delhi. 4–5 March.
- CHANDRA, R. 2019. Pre-mathematical Readiness among Pre-school Children of MCD Schools of Delhi. Paper presented in the *8th National Conference on Teaching-Learning in Mathematics*. RIE, Ajmer. 19–21 December.
- _____. 2019. Language Skills in Pre-primary Children of MCD Schools of Delhi. Paper presented in the national conference on *Learning and Pedagogy*. RIE, Ajmer. 11–12 December.
- SANGAI, S. 2019. Language Across Curriculum. Paper presented in the national conference on *Language Pedagogy*. RIE, Ajmer. 11–13 December.
- _____. 2020. Role of School Management Committees in Improving Science and Mathematics Learning in Schools: A Reflection. Paper presented in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.
- _____. 2020. Managing Teaching Learning in Primary Level Multigrade Schools— Teachers' Challenge. Paper presented in the international conference on *Changing Landscape of Teacher Education*. Faculty of Education, Jamia Millia Islamia, New Delhi. 4–5 March.



_____. 2019. *Methods, Materials and Resources in Language Pedagogy*. Chaired the session in the national seminar on *Language Pedagogy*. RIE, Ajmer. 11–13 December.

_____. 2019. *Mathematics Education*. Chaired the session in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.

DEPARTMENT OF EDUCATION IN LANGUAGES (DEL)

Research Papers and Articles

KAPUR, K. 2019. Let's Encourage Classroom Talk across the Curriculum. *Journal of Applied Languages and Linguistics*. 3(3). pp. 24–41.

KHAN, C.A. 2020. *Rampur ka dabistan-e-shairi ek mukhtasar jayeza*. *The Monthly Jamia*. 116. pp. 179–191.

_____. 2019. *Ghalib ki Shairi per ek Nazar*. *Urdu Research Journal*. 19. pp. 8–12.

KHAR, M. 2019. Language in School Education—Dimensions and Reaching Some Conclusions. *International Journal of English Language and Literature in Humanities*. 7. pp. 1402–1416.

MEGANATHAN, R. 2019. The Language Conundrum: English Language at Higher Education. *University News*. 57(30). pp. 3–10.

Books

MEGANATHAN, R. 2019. *Language Across the Curriculum*. Pearson Education, New Delhi.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES (DESS)

Research Papers and Articles

YADAV, SAROJ. 2020. Vah Kya Din He. *Prathamik Shikshak*. 44(1). pp. 20–24.

MEENA, H.K. 2019. Bharat mein Anusuchit Janjati ki Jansankhya ke Vibhin Pahlun ka Vishleshan. *Jigyasa*. 12(2). pp. 567–576.

_____. 2019. Educational Status of Scheduled Tribes in India. *Jigyasa*. 12. (2). 533–540.

KUMARI, P. 2019. Teaching-learning of Economics in Inclusive Education Setting: Package for Senior Secondary Teachers. *Priorities in Quality Education: Issues, Challenges and Initiatives*. 1(3). p. 8.

SRIVASTAVA, G. 2019. Charkha Symbol of Identity Swadeshi and Swaraj: Past and Present. *International Journal of Applied Social Science*. 6. pp. 1296–1303.

_____. 2019. The Quit India Movement; From the Repertoire of Lived Memories. *Asian Journal of Research in Social Science and Humanities*. 9(7). pp. 11–20.

Books

SRINIVASAN, M.V. 2020. *Education in Contemporary India*. New Delhi: Pearson India Education Pvt. Ltd.



Book Chapters

- KUMARI, P. 2020. Foreign Trade Policy (2015–20) in India. In Arora, Sushama., and Rani, Rita. (Eds.), *Income Inequality, Protectionism and International Trade in Digital Age with Reference to India*. pp. 21–28. Excel India Publishers, New Delhi.
- MEENA, H.K. 2020. Manav Bhugol ki Avdharnayein. In Unit 2 in Block 1: *Manav Bhugol ke Mool tatv. B.Sc. in Geography Programme*. pp. 21–35. IGNOU, New Delhi.
- _____. 2020. Jansankhya ki Visheshhtayein. Unit 10 in Block 3: *Jansankhya, B.Sc. in Geography Programme*. pp. 22–44. IGNOU, New Delhi.

Paper Presentations

- MEENA, H.K. 2019. Awareness and Accessibility of Health Initiatives among the Migrants in Slums of Jaipur, Rajasthan. Paper presented in the international conference on *Heading towards Zero: Sustainable Development in Economy, Environment and Society*. Central University of Haryana, Mahendergarh. 19–21 October.
- _____. 2019. Pollution and Urban Health. Chaired the session in the international conference on *Heading towards Zero : Sustainable Development in Economy, Environment and Society*. Central University of Haryana, Mahendergarh. 19–21 October.
- KUMARI, P. 2019. Teaching Learning and Assessment at Upper Primary Stage. Paper presented in the national conference on *Technological Innovations in Management, Engineering and Science (TIMES-2019)*, SRM University Delhi-NCR, Sonapat, Haryana. 26–27 April.
- _____. 2019. Benefits of mobile application in differential educational planning for improving the learning levels of students. Paper presented in the second international conference on e-Business (ICON e-BIZ), Shri Ram Swaroop Memorial Group of Professional Colleges (SRMGPC) & Shri Ram Swaroop Memorial University (SRMU), Lucknow, U.P. 7–9 November.
- SAROJ, Y. 2019. Contemporary trends, issues, challenges and way forward in school education. Chaired the session in the national conference on *Action Research in School Education*, Central University of Gujarat, Ahmedabad. 22 October.
- MALIK, T. 2019. World Environment School. Invited talk in the international conference on *Sustainable Education*. India Habitat Centre, New Delhi. 10 September.

DEPARTMENT OF GENDER STUDIES (DGS)**Paper Presentations**

- AGRAWAL, P. 2019. Education for Humanisation and Professionalisation. Keynote address in the international conference on *Higher Education in South Asia: Challenges and Possibilities*. Department of Education, Central Institute of Education, University of Delhi. 2 December.



EDUCATIONAL SURVEY DIVISION (ESD)

Research Papers and Articles

- PAJANKAR, V.D. AND SRIVASTAVA, S. 2019. An Approach of Estimating School Enrolment with Reconstructive Cohort. *Approach Journal of Physics: Conference Series*. 1366 (2019) 012116, doi:10.1088/1742-6596/1366/1/012116.
- PAJANKAR, V.D. 2019. Assessment of Students' Learning in Different Subjects at Different Level of Grades in Maharashtra (India). *International Journal of Research*. 9(1). pp 73–89.
- BHUSHAN, S. (IN PRESS). Early Mathematics Learning Assessment: A mirror to Primary Mathematical School Readiness. *The Primary Teacher*. 42 (4).

Paper Presentations

- SINGH, V.P. 2019. Changes in Pedagogy of Schools for Reconstruction of Concepts. Paper presented in the national conference on *Innovative Practices and Digitalisation to Enhance Teacher Education Programme*, INMANTECH, Ghaziabad. 29 April.
- PAJANKAR, V.D. 2019. An Approach of Estimating School Enrolment with Reconstructive Cohort Approach. Paper presented in the international conference on *Applied Mathematics and Statistics*, University of Malaysia Pahang. 23–25 July.
- _____. 2019. National Achievement Survey: A Practice of Assessment of Learning in India to Know the Health of the System and to Provide Intervention for Improvement of the Learning Level of Pupils. Invited talk in the international conference on *Education Measurement, Evaluation and Assessment*, Emeritus College of Advance Education, Abu Dabhi (UAE). 8–9 October.
- _____. 2020. National Achievement Survey: Large Scale Assessment Survey in India to Assess the Learning Level of Students. Invited talk in the international conference on *Importance of Statistics in Global Emerging Scenario*. SP Pune University, Pune in conjunction with 22nd Annual Conference of Society of Statistics, Computer and Applications, Pune. 24 January.
- BHUSHAN, S. 2019. Achieving Agenda 2030: Role of Statisticians. Invited talk in the national conference on *Statistics for Sciences, Social Sciences and Humanities (NCSSSH-2019)*. Department of Mathematics and Statistics, Mohanlal Sukhadia University, Udaipur. 13–14 September.
- _____. 2019. Measuring Equity in School Education: Some Methodological Issues. Paper presented in the annual international conference on *Exclusion, Inclusion and Equity in Education*, Comparative Education Society of India, Jawarlal Nehru University, New Delhi. 9–11 December.
- _____. 2019. English Language Learning Outcomes at the Secondary School Stage in India. Paper presented in the international conference on *The Inclusion, Mobility and Multilingual Education Conference: Exploring the Role of Languages for Education and Development*. Bangkok, Thailand. 24–26 September.



PAJANKAR, V.D. AND SRIVASTAVA S. 2019. An Approach of Estimating School Enrolment with Reconstructive Cohort. *Approach Journal of Physics: Conference Series*. 1366 (2019) 012116, doi:10.1088/1742-6596/1366/1/012116.

PAJANKAR, V.D. 2019. Assessment of Students' Learning in Different Subjects at Different Level of Grades in Maharashtra (India). *International Journal of Research*. 9(1). pp. 73–89.

PLANNING AND MONITORING DIVISION (PMD)

Research Papers and Articles

ASHITA, R. (IN PRESS). Learning Systems in the Republic of Korea: Lessons from the School. *Primary Teacher*. 48(1).

SUBHASH. P.D. AND RAM, S. 2019. Socio-dramatic Play as Vehicle for Early Mathematics and Language Learning. *Research Review International Journal of Multi disciplinary*. 4(12). pp. 166–169. www.rrjournals.com.

SUBHASH. P.D. AND JOSHITH, V.P. 2020. Professional Development through Massive Open Online Courses: Awareness and Perception of Secondary School Teachers in Kerala. *Research Review International Journal of Multi disciplinary*. 5(3). pp. 1–5. www.rrjournals.com.

Paper Presentations

ASHITA, R. 2019. Curriculum Design and Learning Outcomes. Paper presented in the induction programme under the Scheme of PMMMNMTT on *Curriculum Design and Development at Higher Education Institutions*. Gandhigram Rural Institute, Tamil Nadu. 22 April–21 May.

DEPARTMENT OF CURRICULUM STUDIES (DCS)

Research Papers and Articles

SRIDEVI, K.V. 2019. Promoting the Development of Teacher Professional Knowledge: Integrating Content, Pedagogy and Technology while Teaching. *Voices of Teachers and Teacher Educators*. 18(1). pp. 108–118.

SRIDEVI, K.V. AND MOHINI, N. 2019. Trends in School Dropout Rate in India. *Researchers Guild*. 1(3). <https://doi.org>.

Paper Presentations

SRIDEVI, K.V. AND RITU, Y. 2019. A Review on Pedagogical Content Knowledge (PCK) in the Perspective of Teachers Professional Practice and Pre-service Education. International conference on *Changing Landscape of Teacher Education*. Department of Educational Studies, Jamia Millia Islamia, New Delhi. 4–5 March.

NUNA, A. 2020. Curriculum Development Practices in Teacher Education. Chaired the Technical Session in the National Seminar on *Changing Scenario, New Trends and Innovations in Teacher Education*. School of Education, Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalaya, Wardha, Maharashtra. 20–21 February.



LIBRARY AND DOCUMENTATION DIVISION (LDD)

Research Papers and Articles

- JAIN, P. MAHAJAN, A AND BABBAR, P. 2019. Web Contents of Library Portals: An Analytical Study of Selected Libraries under Ministry of Culture, India. Proceedings of the 2nd international conference on *Equitable Access to Government Information and Data: Role of Government and Public Libraries in South Asia*. Central Government Library Association, Delhi, 17–19 October. pp. 405–420.
- JAIN, P AND BABBAR, P. 2019. MOOCs through SWAYAM: A Study of Biological Sciences and Bioengineering Education. Proceedings of the national seminar on *Access and Availability of Medical Literature in Electronic Environment (AMLEE-2019)*. AIIMS, Delhi. 2–3 September. pp. 71–87.
- _____. 2019. Smart Education through SWAYAM: A Study of Library and Information Science Education through MOOCs. Proceedings of the 3rd *DLA-SRFLIS International Conference on Digital Age Strategies in Information Management for Sustainable Librarianship*. University of Delhi and SRFLIS. 19–20 April. pp. 286–294.

Book Chapters

- SAMANTARAY, M. 2019. Transformation Games for Innovation and Sustainability in Libraries. In Dhanavandan, s. (Ed.), *Innovative Librarianship: A Foresight on Technology Practices and Services*. pp. 431–443. CUTN in association with Dominant Publishers and Distributors Pvt. Ltd., New Delhi.
- _____. 2019. Quality Assurance in Library and Information Science Education through Open and Distance Learning in India. In Singh, B.K. (Ed.), *Academic Libraries— Collection to Connectivity*. pp. 27–33. Shree Publishers and Distributors, New Delhi.
- _____. 2019. Librarian as Master Thinker for Innovative Practice: A Case Study in Library and Documentation Division. In Gaur, Ramesh C., Kumar, Sanjay., Kumar, Ajit., and Kumar, Mukesh (Eds.), *Equitable Access to Government Information and Data: Role of Government and Public Libraries in South Asia*. pp. 389–404. CGLA. New Delhi.

Paper Presentations

- SAMANTARAY, M. 2019. Transformation Games for Innovations and Sustainability in Libraries. Paper presented in the national conference on *Innovative Librarianship*. CUTN Thruvarur, Tamil Nadu. 22 August.
- _____. 2020. Open Access to Scholarly Contents. Paper presented in the national conference on *Digital Scholarship (NCDS-2020)*. CUTN. 12–13 March.
- _____. 2019. Innovative Application in Libraries. Chaired the session in the national conference on *Innovative Librarianship*. CUTN Thruvarur, Tamilnadu. 15 August.
- _____. 2020. Social Media: A Link between Technology, Staff and Community. Chaired the session in the national seminar on *Social Media and Librarianship Connecting the Communities*. Mizoram University. 27 February.
- _____. 2020. Open Access to Scholarly Contents. Chaired the session in the national conference on *Digital Scholarship (NCDS-2020)*. CUTN. 12 March.



CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)

Research Papers and Articles

KUMAR, I. 2019. Harness of Soft Skills to Everyday Life: A Scientific Technique to Gain Success. *International Journal of Engineering and Advanced Technology*. 8(10). pp. 2141–2145.

_____. 2019. Soft Skills and Positive Attitude: Science of Bridging Gap. *International Journal of Engineering and Advanced Technology*. 9(2). pp. 1301–1304.

KUMAR, A. (IN PRESS). Prediction of Arsenic Vulnerable Zones in the Groundwater Environment of a Rapidly Urbanising Set up. Guwahati, India. *Geochemistry*. <http://doi.org/10.1016/j.chemer.2019.125590>

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)

Research Papers and Articles

SUDHIR, PAWAN. 2020. Art Integrated Learning—Connecting Visual Arts with other Subjects in School. Keynote address in the Second Annual Conference of *Indian Art and Design Educators Association*. (IADEA), Delhi. 3–4 October.

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

Paper Presentations

VEERAAH P., DESAI, S AND GEETA, T. 2019. Skill Development and Vocational Education Programmes Enhances the Employment Opportunities in India—A Study. Paper presented in the *All India Commerce Conference of Indian Commerce Association*. KIIT Deemed University, Bhubaneswar. 22–24 December.

_____. 2020. Gandhian Philosophy of Education— Special Reference to Skill based Education. Paper presented in the national conference on *Implications of Gandhian Thoughts for School Curriculum*. Regional Institute of Education, NCERT, Bhopal. 30–31 January.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Research Papers and Articles

MEENA, O.P. 2019. Corrosion Inhibition Effect of Aerial Parts of *Euphorbia Neriifolia* Linn on Aluminium in Nitric Acid Solution. *International Journal of Green and Herbal Chemistry*. 2019. 8(4). pp. 801–814.

NAINAWAT, A.K. 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). pp. 234–242.

SHARMA, R.K. 2020. Synthetic and Computational Studies on CuI/ligand pair promoted activation of C (Aryl)–Cl bond in C–N coupling reactions. *Heliyon* (Elsevier). 6(2). e03233. <https://doi.org>.



Books

GOSWAMI, A. 2020. *Bhartiya Moolya Drishti: Ek Sanatan Vimarsh*. Sahityagar, Jaipur.

Paper Presentations

ARYA, V.P. 2019. Charge Transport Measurements on Individual Multiwall Carbon Nanotubes. Paper presented in the Second International Conference on *Recent Trends in Environment Sustainable Development (RTESD-2019)*. Vivekanand Global University, Jaipur. 17–19 October.

_____. 2019. Challenges Creating Linguistically Inclusive Classrooms in India. Paper presented in the 8th National Conference on *Teaching-Learning in Mathematics Education (NCTLM)*. RIE, Ajmer. December 19–21.

MEENA, M. 2019. Challenges of Creating Linguistically Inclusive Classrooms in India. Paper Presented in the national seminar on *Language Pedagogy*. R.I.E, Ajmer. 11 December.

_____. 2019. Socio-cultural and Ideological Preconditions of Gender Equality in India. Paper presented in the national conference on *Gender Equality: Issues and Challenges in India*. Government College, Karouli, Rajasthan, 23–24 December.

NAINAWAT, A.K. 2019. Mathematics in School Curriculum. Chaired a session in the 8th National conference on *Teaching— Learning in Mathematics*. RIE, Ajmer. 19–21, December.

RANJAN, R. 2019. Challenges of Creating Linguistically Inclusive Classrooms in India. Paper Presented in the national seminar on *Language Pedagogy*. R.I.E, Ajmer. 11–13 December.

_____. 2019. Socio-cultural and Ideological Preconditions of Gender Equality in India. Paper Presented in the national conference on *Gender Equality. Issues and Challenges in India*. Government College, Karouli, Rajasthan. 23–24 December.

_____. 2019. Relevance of Gandhian Teaching in Present Scenario. Paper presented in the international conference on *Embracing the Other: Rediscovering Mahatma Gandhi and the Power of Non-Violence*. M.L.V. Government College. Bhilwara, Rajasthan. 20–21 December 2019.

SHARMA, S.V. 2019. Research in Mathematics Education. Chaired a session in the *8th National Conference on Teaching—Learning in Mathematics*. RIE, Ajmer. 19–21 December.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL**Research Papers and Articles**

CHOUHAN, N, SINGHAI, R AND SHARMA, S.K. (IN PRESS). Assessment of Suitability of Soil Test Method for available-P estimation to Soybean Grown in Vertisols. *Plant Archives*, 20(1). pp. 2987–2995.

_____. 2020. Rhizosphere Effect on the Availability of Phosphorus to Soybean crop. *Advances in Bioresearch*. 11(1). pp. 16–21.

GARG, A AND SHUKLA, A. 2019. *Saprash*. Prerna Publication, Bhopal.



- KHOBUNG, V. 2019. Knowledge Society and Cultural Diversity: Its Symbiotic Relations. *GAP GYAN— A Global Journal of Social Sciences, Special Issue on Knowledge Society and Higher Education*. 2(1). pp. 13–17.
- MAKWANA, S.K. 2019. *Gujarati Gazalmasufirang*. Bookshelf Publication, Ahmedabad, Bhopal.
- _____. 2019. *Lokrang: Gujaratnaaadilokgito*. Regional Institute of Education, Bhopal.
- PETHIYA, S. 2019. *Global Citizenship Education: A Handbook for Teachers at Upper Primary Level*. Regional Institute of Education, Bhopal.
- SARKAR, S., MUKHARJEE, S AND GWAL, A.K. 2019. Response of Low Latitude Ionosphere to the Space Weather. Event of November 2012 in the Asian Sector. *Indian Journal of Radio and Space Physics*. 48. pp. 49–56.
- SARKAR, S. 2019. An Investigation about Students’ Misconception on the Concept of Force in a Constructivist Learning Environment. *Review of Research*. 8(5). pp. 9–14.
- SETHY, P.N. 2020. Significance of Gandhian Economic Thought in Current Scenario. *Journal of Madhya Pradesh Economic Association*. 30(1). pp. 193–199.
- SINGH, A, SINGHAI, R AND BISWAS, A.K. 2019. Influence of Pyrolysis Temperature on Production Yield and Nutrient Properties of Produced Biochar. *European Journal of Business and Social Sciences*. 17(4). 221.
- SINGHAI, R. 2019. Bridging Learning Digital Divide through ICT Teaching. *Journal of Emerging Technologies and Innovative Research*. 16(5). 552–562.
- SINGHAI, R. AND PRAJAPATI, R.P. 2019. Bridging Learning Digital Divide through ICT Teaching in Physics. *JETIR*, 6(5). pp. 581–591.
- TRIPATHY, P.K. 2019. Productive Information Searching: Query Wise Study of Search Engines Effectiveness. *International Journal of Information, Library and Society*. 8(2). pp. 11–19. <http://publishingindia.com/ijils/>.

Books

- PETHIYA, S. 2019. *Building Knowledge, Transforming Lives: A GCED Handbook*. APCEIU, UNESCO, Seoul.

Book Chapters

- KHOBUNG, V. 2020. Evolution and Incorporation of Fundamental Duties to the Constitution of India. In Seth, Sriji (Ed.), *Role of Fundamental Duties for Sustainable Development and Nation Building*. pp. 445–449. Aksharam Media and Publication, Bhopal.

Paper Presentations

- MAHTO, G.M. 2018. Artificially Intelligent (AI) Teachers and the Changing Role of Human Teachers Teaching Learning Process. Paper presented in the national seminar on *Changing Scenario, New Trends and Innovation in Teacher Education*. Mahatma Gandhi Antarrashtriya Hindi Vishwavidyalayam Wardhs, Maharashtra. 20–21 February.
- _____. 2020. Return to Nature: A Study of Relevance of Mahatma Gandhi’s Philosophy on Nature in the Polluted World Today. Paper presented in



the national conference on *Implication of Gandhian Thoughts for School Curriculum*. RIE, Bhopal. 30–31 January.

- MAKWANA, S K. 2019. Aspirational Districts and Lchhawar Block. Paper presented in the national seminar on *Learning Outcomes: Best Pedagogical Practices*. RIE, Ajmer. 7–9 March.
- PETHIYA, S. 2019. Power of Systematic Teacher Training: Trained Teachers can Mainstream GCED. Paper presented in the international conference on *GCED: Platform on Pedagogy and Practice*. APCEIU, Seoul. 4–5 September.
- _____. 2020. Pedagogical Processes for Realising Gandhian Philosophy as a Way of Life. Paper presented in the national conference on *Implications of Gandhian Thoughts for School Curriculum*. RIE, Bhopal. 30–31, January.
- SARKAR, S. 2019. Statistical Analysis of Nighttime TEC Depletions and GPS Loss of Lock in the Crest of Anomaly Region. Paper presented in the *20th International Beacon Satellite Symposium*. University of Warmia and Mazury, Olsztyn, Poland. 19–23, August.
- _____. 2020. A Project based Learning Approach to Promote STEM Education in the High School Science Classroom. Paper presented in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.
- SETHY, P.N. 2019. Changing Structure of Occupation in KBK Districts of Odisha. Paper presented in the 102nd Annual Conference of *Indian Economic Association*. Pt. Ravishankar Skhukla University, Raipur. 27–29 December.
- _____. 2020. A Comparative Analysis of Sectoral Disparities in Odisha and Indian Economy. Paper presented in the national seminar on *Indian Economy: Issues and Challenges*. School of Economics, Devi Ahalya University, Indore, M.P. and Madhya Pradesh Economic Association. 4–5 March.
- _____. 2020. Changing Land Utilisation and Distribution Pattern in Odisha and Indian Economy. Paper presented in the national seminar on *Challenges of Regional Development and Inclusive Growth in India*. Department of Regional Planning and Economic Growth, Barkatullah University, Bhopal. 6–7 March.
- _____. 2020. Relevance of Gandhian Economic Thought in Modern Indian Context. Paper presented in the national conference on *Implications of Gandhian Thoughts for School Curriculum*. RIE, Bhopal. 30–31 January.
- DWIVEDI, P, GAWSHINDE, A AND SINGHAI, R. 2020. Preparation and Surface Characterisation of Activated Carbon by Phosphoric Acid Activation and its Value in Environment Wellness. Paper presented in the national conference on *Scientific and Environmental Innovation and Implementation of Sustainable Development Goals*. MPCST, Bhopal. March 7–8.
- KHOBUNG, V. 2020. *Gandhi's Trusteeship and its Implication for School Curriculum*. Paper presented in the national conference on *Implications of Gandhian Thoughts for School Curriculum*. RIE, Bhopal. 30–31 January.
- SEBU. S. 2020. Urbanisation in Kohima City: Issues and Challenges. Paper presented in the national seminar on *Challenges of Regional Development and Inclusive Growth in India*. Department of Regional Planning and Economic Growth, Barkatullah University, Bhopal. 6–7 March



REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

Research Papers and Articles

- DASH, S.K. 2019. Synergistic Behaviour in Binary Mixtures of DEHPA and MIBK- an Acoustic Study. *Orissa Journal of Physics*. 26(1). pp. 59–64.
- GANGMEI, E., GOWRAMMA, I. P. AND KUMAR, G. 2019. Trends of Recent Research on Effective Leadership in Relation to School Education. *International Journal of Innovative Studies in Sociology and Humanities*. 4(5). pp. 20–30.
- KAPOOR, S. 2019. Thermo-solutal Chemically Reacting Mhd Natural Convective Flow Past a Low Heat – Resistance Sheet with Soret Effect. *Journal of Physics through Computation*. 2. pp. 2617–1163.
- _____. 2019. Double Diffusive Convection in a Linearly Moving Permeable Vertical Surface under Magnetic Effect with Heat Source in Porous Medium. *American International Journal of Research in Science, Technology, Engineering and Mathematics*. 25. pp. 155–161.
- _____. 2019. Linear Stability Analysis of Thermo-solutal Couple Stress Fluid with Linear Heating in Porous Medium. *Journal of Basic and Applied Engineering Research*. 6(2). pp. 131–136.
- KETAKI, K. 2019. Political Participation of Tribal Women in Odisha. *Third Concept*. 33(386). pp. 38–42.
- _____. 2019. Dissertation on Role of Ethics in Public Administration. *Scholarly Research Journal for Interdisciplinary Studies*. 6(50). pp. 12116–12133. www.srjis.com.
- _____. 2019. Power and Functions of Governor. *Scholarly Research Journal for Interdisciplinary Studies*. 6(47). pp. 11433–11445. www.srjis.com.
- _____. 2019. Today's Party System in Indian Politics. *Research Journal of Humanities and Social Sciences*. 10(2). pp. 2321–5828. www.rjhssonline.com.
- KUMAR, A. AND BEHERA, L. 2019. Pre-service Teachers' Perspectives on Teaching in Multicultural Diverse Classrooms. *Renova*. 5(1). pp. 28–42.
- MAHANTA, B. AND BEHERA, L. 2019. Use of Mathematics Kit at Upper Primary Level. *Anweshan Journal of Education*. 10 (1). pp. 11–18.
- NAYAK, D. BEHERA, L. 2019. Effectiveness of Mobile Application for Monitoring DIETs in Odisha. *The Newsletter. CEMCA*. 5(4). pp. 21–23.
- PANDA, B.N. 2019. Analysis of Class-III Environmental Study Textbook of Odisha. *Journal of Aneswan*. 9(2). pp. 94–100.
- ROUT, S. AND BEHERA, L. 2019. Teaching Learning Process in Odisha Adarsha Vidyalaya (OAVs): An Analysis. *Anweshan Journal of Education*. 10(2). pp. 16–24.
- SANGEETA AND MOHALIK, R. 2019. Vocational Knowledge of Students at Secondary Level in Jharkhand. *International Journal of English Language, Literature and Humanities*. 7(10). pp. 234–248.
- SETHY, R. AND MOHALIK, R. 2019. Smart Classroom for Teaching Learning at Secondary Level in West Bengal: An Exploratory Study. *American Journal of Social Sciences and Humanities*. 4(1). 129–137.



- SETHY, R. 2019. Yoga for Human Well-Being. *Third Concept*. 33(386). pp. 31–37.
- _____. 2020. Teacher Effectiveness of History Teachers at Secondary Level in Relation to Gender, Experience and Qualification in Odisha. *Academy of Social Science Journal*. 5(3). pp. 1643–1648.
- AGARWAL, P.C. 2020. Yuva aur shiksha. *Shikshik Manthan*. 6. pp. 11–13.
- _____. 2019. Bharatiya Swatantra Andoloana aur Shiksha. *Shaikshik Manthan*. 1. pp. 34–36.
- DAS, S.K. AND SATAPATHY, M.K. 2020. Vegetational Study of the Temple City of Bhubaneswar (India): Analysis of Floristic Diversity. *Environment and Ecology*. 38(2). pp. 265–276.

Book Chapters

- KUMAR, A AND BEHERA, L. 2019. Teacher Preparation for Inclusive Education in the Context of Children with Special Needs: Past, Present and Future. In Swain, B.C., and Behera, K. (Eds.), *Reaching the Unreached: The State of Differently Abled Learners*. pp. 139–148. Desh Vikash Publication, Visakhapatnam.
- MOHALIK, R. AND SETHY, R. 2019. Teacher Assessment Practices in Kendriya Vidyalayas: A Critical Analysis. In Patel., and Srivastava (Eds.), *Teacher Performance Assessment in Education*. pp. 50–61. Inter-University Centre for Teacher Education, The Maharaja Sayajirao University of Baroda, Vadodara.

Paper Presentations

- AMIT, R. 2019. The Curious Case of a Minor Poet Aspiring to be a Major Philosopher—king. Paper presented in the conference on *Philosophy and Poetry: Reliving the Negotiation*. North Bengal University, Siliguri. 2 August.
- DASH, R. 2019. Skill Development and Entrepreneurship in Odisha through Learning of Skills in Schools. Paper presented in the *51st All Odisha Economic Association Conference*. Kendrapara. 9–10 February.
- GOWRAMMA, I.P. 2019. Scenario of Teacher Education. Chaired the session in the national seminar on *Trends, Issues and Challenges of Teacher Education Programme in 21st Century*. Department of Education, Sambalpur University, Odisha. 6 April.
- _____. 2020. Equal opportunity and Non-discrimination: Concerns in the Classroom. Chaired the panel discussion in the international conference on *Education in the 21st Century*. RIE, Bhubaneswar. 21 February.
- PANDA, B.N. 2019. Trends and Issues in Teacher Education. Keynote address in the national seminar on *Teacher Education*, Sambalpur University, Sambalpur, Odisha. 5 April.
- _____. 2019. Quality of Education: Issues and Strategies. Keynote address in the national seminar on *Teacher Education*. Medinapur Teacher Training College, West Bengal. 14 June.
- _____. 2020. Nai Talim and its Impacts in 21st century. Paper presented in the national seminar on *Gandhiji Role and Its Impact in 21st Century*. G.M. University, Sambalpur. 8–9 February.
- _____. 2020. 21st Century Skills and Its Status in Higher Education. Invited talk in the international conference on *Dynamics of Higher Education in*



- 21st Century Skills*. B. Autonomous Mahavidyalaya, Chandikhole, Jajpur, Odisha. 16 February.
- _____. 2020. Assessment. Chaired the Panel Discussion in the International Conference on *21st Century Education*. RIE, Bhubaneswar. 22 February.
- SATAPATHY, M.K. 2019. Implementation of Environmental Policies and Popularisation of Science. Chaired the session in the national conference on *Science Education*. NERIE, Umiam. 14–15 November 2019.
- _____. 2019. *Towards Sustainable Development : Role of teachers and teaching*. Paper presented in the national conference on *Science Education*. NERIE, Umiam. November 14–15.
- _____. 2019. Policy Evaluation and Critical Analysis. Chaired the session in the international conference on *Education in the Twenty first Century*. RIE, Bhubaneswar. 21–23 February.
- _____. 2020. Socio-economic Impact and Environmental Sustainability of Sunderban Areas: Role of Education. Paper presented in the international conference on *Socioeconomic Development and Its Impact on Environment in Sunderban*. Sabuj Teacher Training College, Praganas, West Bengal. 20–21 January.
- BEHERA, L. 2020. Addressing Twenty First Century Learners. Chaired the session in the international conference on *Education in the Twenty First Century*. RIE, Bhubaneswar. 21–23 February.
- GANGMEI, E., UPASSANA, R. AND KUMAR, G. 2020. A Journey from Theory to Practice: A Case Study of field engagement in B.Ed. of RIE, Bhubaneswar. Paper presented in the international conference on *Education in the 21st Century*. RIE, Bhubaneswar. 21–23 February.
- GIRI, C. AND GOWRAMMA, I.P. 2020. Academic Achievement Gap in Different Mathematical Skills and Abilities of Grade-V Students. Paper presented in the international conference on *Education in the 21st Century*. RIE, Bhubaneswar. 21–23 February.
- MOHAPATRA, A.K. 2020. An Investigation of Senior Secondary Students' Expectations of School Education: What Really Matters to them? Paper presented in the international conference on *Education in the 21st Century*. RIE, Bhubaneswar. 21–23 February.
- PRIYANKA, K. AND GOWRAMMA, I.P. 2020. Explicit Teaching of Nature of Science. Paper presented in the international conference on *Education in the 21st Century*. RIE, Bhubaneswar. 21–23 February.

REGIONAL INSTITUTE OF EDUCATION, MYSURU

Book Chapters

- SHAJI, KARUNAKARAN, B. 2020. ICT Mediated Higher Education: Profiling a Digital Manifesto. In Chitra.Y. (Ed.). *Future Dimensions of Higher Education— A Quantum Leap in Technology*. pp. 82–88. Madikeri: KSHEC.

Paper Presentations

- HARINATH, P.R. 2019. Bhavakavula Kavithaa Siddhanthaalu. Paper presented in the—seminar on *Telugu Kavithaa Siddhanthaalu*, Spandana: Ananthapur:



Anantha Saahithee Samithi, in collaboration with Central Sahithya Academy. New Delhi. 19 May.

_____. 2019. Paper Presented in the Seminar on *611th Birth Celebrations of Annamacharya*. Tirupathi, TTD. 20 May.

_____. 2020. *Literary Works of G.S. Mohan*. Paper presented in the seminar on *Life and Works of G.S. Mohan*, Chennai, Madras University. 29 January.

SHAJI, K, B. 2019. Gendered Self and the Cinematic Fable: Changing semantics of the movies. Paper presented in the seminar on *Reading between the Frames: Theorising Impact—Kerala*, MMS Govt. College, Malayinkeezhu. 28–30 November.

_____. 2019. Politics of Movies. Chaired the session in the — seminar on *Reading between the Frames: Theorising Impact in Kerala*. MMS Govt College.

_____. 2020. Future Dimensions of Higher Education— A quantum leap in technology. Madikeri: Government First Grade College. 22 February.

SOMASHEKAR, T.V. 2020. A Study of the Factors Affecting Difficulties in Learning Mathematics by Class IX students of DM School, Mysuru. Paper presented in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.

_____. 2020. Emotional Intelligence of Working Women at RIE, Mysuru. Paper presented in the seminar on *Gender Sensitization: Equality and Opportunities*. Mysuru, Maharani College, Mysuru. 27 February.

Research Papers and Articles

RANI, S AND GOPAL, G.V. 2019. Phyto-chemical Screening and Antioxidant Studies of Leaf and Bark Extract of *Poeciloneuron indicum* Bedd. *Clusiaceae*. *International Journal of Botany Studies*. 4(4).

SHAJI, K, B. 2019. Kumaran Asan— Poetic Discourses in Renaissance and Transcendentalism. *Paripex International Journal*. 8.(5). pp. 22–24.

_____. 2019. Literary Odysseys — Multitudinous Perceptions of Truth, Authenticity of Meaning. *IJMRD Journal*. 6(2). pp. 45–51.

_____. 2019. Philosophy, Art and Transfiguration in Nietzsche and Raphael: Their Impact on the Aesthete of Literature, *Journal for Research Scholars and Professionals of English Language Teaching*. (2). pp. 43–50.

NAGARAJ, G., SUKUMAR, A., TANGPU, V. AND KUMAR, S. 2020. Exploring Magneto Sensitivity of *Drosophila*: A Novel Low-cost Project for School Students to Inculcate Scientific Method. *International Journal of Recent Scientific Research*. 11 (2). 37512–37516.

Book Chapters

SHAJI, K, B. 2020. ICT Mediated Higher Education: Profiling a Digital Manifesto. In Chitra.Y.(Ed.). *Future Dimensions of Higher Education— A Quantum Leap in Technology*. pp. 82–88. Madikeri: KSHEC.

Paper Presentations

HARINATH, P.R. 2019. Bhavakavula Kavithaa Siddhanthaalu. Paper presented in the seminar on *Telugu Kavithaa Siddhanthaalu*. Spandana: Ananthapur:



Anantha Saahithee Samithi, in collaboration with Central Sahithya Academy. New Delhi. 19 May.

_____. 2019. *Annamayya Sankeerthana Llobhinna Chandogathulu*. Paper presented in the seminar on *611th Birth Celebrations of Annamacharya*. Tirupathi, TTD. 20 May.

_____. 2020. *Literary Works of G.S. Mohan*. Paper presented in the seminar on *Life and Works of G.S. Mohan*. Madras University, Chennai. 29 January.

SHAJI, K, B. 2019. Gendered Self and the Cinematic Fable: Changing Semantics of the Movies. Paper presented in the seminar on *Reading between the Frames: Theorising Impact in Kerala*. MMS Govt. College, Malayinkeezhu. 28–30 November.

_____. 2019. Politics of Movies. Chaired the session in the seminar on *Reading between the Frames: Theorising Impact in Kerala*. MMS Govt College, Malayinkeezhu. 28–30 November.

_____. 2020. Future Dimensions of Higher Education— A Quantum Leap in Technology. Madikeri. Government First Grade College. 22 February.

SOMASHEKAR, T.V. 2020. A Study of the Factors Affecting Difficulties in Learning Mathematics by Class IX Students of DM School, Mysuru. Paper presented in the national seminar on *Innovation and Integration in Education of Modern School Sciences and Mathematics*. RIE, Mysuru. 27–29 January.

_____. 2020. Emotional Intelligence of Working Women. RIE, Mysuru. Paper presented in the seminar on *Gender Sensitisation: Equality and Opportunities*. Maharani College, Mysuru. 27 February.

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

Research Papers and Articles

DEVI, CH. S. 2019. Multilingualism and Education in Mother Tongue: A Case of India's North-East. *English Language and Literature*. 7(2). pp. 323–327.

_____. 2019. Mother Tongue Education: Aspirations and Responses in Manipur. *Language in India*. 19. pp. 327–339.

DEY, T. AND GHILDYAL, P. 2020. Socio-economic Status as a Determinant of Educational Aspirations: A Study of the Tiwa Tribe of Assam. *Indian Journal of Psychology and Education (IJPE)*. 10(1). pp. 16–20.

Books

DEY, T., BARUAH, H. AND SENGUPTA, S. 2019. *Environmental Science, A Self Learning Material for Assam State Open School, Guwahati*. Assam Higher Secondary Education Council, Guwahati.

Book Chapters

DEVI, CH. S. 2019. Improving Curriculum for Positive Mental Health of Adolescents: A Case of Manipur. In Beda, Ch. et al.(Eds.). *Present Trends and Issues in Environmental and Occupational Health*. pp. 108–115. Akansha Publishing House, New Delhi.



Paper Presentations

- DEVI, CH. S. 2018. Hindu Religious Literature and Cultural Transformation in Manipur. Paper presented in the International Conference on *Interdisciplinary Coining New Ideas— Transcending New Horizons-19*. Department of Humanities and Social Science, NIT, Shillong partly & ICSSR-NERC. 19–20 October.
- _____. 2019. Improving Curriculum for Positive Mental Health of Adolescents: A Case of Manipur. Paper presented in the national seminar on *Present Trends and Issues in Environmental and Occupational Health*. Department of Education, Manipur University. 25–26 April.
- DEY, TULIKA. 2019. Science Learning— Issues and Concerns. Chaired the session in the national seminar on *Science Education*. NERIE. 14–15 November.
- DKHAR, B.R. AND KHARLUKHI, B. 2019. Education as a Facilitator Towards Cultural and Social Development. Paper presented in the international conference on *Interdisciplinary: Intersections of Literature and History for Social and Cultural Change (COIN-2019)*. Department of Humanities and Social Science, NIT, Shillong and ICSSR-NERC. 19–20 October.
- DKHAR, B.R. 2019. Science Education for Sustainable Development and Innovative Practices. Chaired the session in the national seminar on *Science Education*. NERIE, Umiam. 14–15 November.
- NAMBIAR, R. S, 2019. Use of Experiments in Achieving Learning Outcome in Science. Paper presented in the national seminar on *Science Education*. NERIE. 14–15 November.



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.	Development and Tryout of a Package Based on Structured English Immersion Programme at Secondary Level	Vijayan K.	Faisal K.V.	DTE	Kannur University	2020
2.	In-Vitro Studies of <i>Carum</i> Species	J. Mandal	Poornima Sharma	RIE, Bhopal	Barkatullah University	2019-20
3.	A Study on Teaching English Grammar through Comics and Cartoons in Smart Classrooms at Primary Level	R. Raizada	Anu Thomas Johnson	RIE, Bhopal	Barkatullah University	2019-20
4.	A Study of Self Concept and Education Aspiration of Kasturba Gandhi Balika Vidyalaya	Ramesh Babu	R. Pushpa Namdeo	RIE, Bhopal	Barkatullah University	2019-20
5.	Global School Partnership Programmes 'A Study of Their Impact of Develop Global Awareness among Secondary School Students of Bhopal Division'.	R. Raizada	Vinita Mishra	RIE, Bhopal	Barkatullah University	2019-20





6.	<i>Sanskrit Shiksha Vishay Parpraman Ka Vikas Tatha Paramparagat Vidhi se Uski Tulnayen Shiksha Shastrī Chhatradhiyapakon ki Sanskrit Shikshan mein Uplabdh avem Aatma Sankalpana ke Aadhar par</i>	Ratnamala Arya	Mahesh Prasad	RIE, Bhopal	Barkatullah University	2019-20
7.	<i>Madhaya Pradesh ki Shalaya Shiksha avem Shikshak Shiksha, Pathyakaram mein Yog Shiksha ka Sadhantik avem Vyavaharik Paksh ek Anushilan</i>	H.K. Senapaty	Ram Kumar Swarnkar	RIE, Bhopal	Barkatullah University	2019-20
8.	Effect of ICT Mediated Constructivist Learning amongst Secondary School Students	H.K. Senapaty	Raja Kishore Nayak	RIE, Bhopal	Barkatullah University	2019-20
9.	Pollen Morphology and In-Vitro Pollen Germinability Studies in the Selected Taxa	Gopal G.V.	Mary, A.	RIE, Mysuru	University of Mysore	2019-20

Awards and Fellowships

A. NCERT Doctoral Fellowships 2019

S.No.	Name and Address of the Doctoral Fellows	Title of the Study
1.	Kumar Ujwal University of Delhi	Psycho-Social Influences on the Experiences and Responses to Intergroup Bias
2.	Aarti Singh Tezpur University	Study of Inclusive Education Component in Elementary Teacher Education Programme in Assam
3.	Paridhi Joshi IGNOU, New Delhi	Teachers' Agency in School System in India: An Ethnographic Study of the 'other' in Government Girls Inter College in Bhimtal, Uttarakhand
4.	Sarath Chandran R. University of Kerala	Influence of Select Science Process Skills on Scientific Creativity for Learning Environmental Biology among Higher Secondary Schools Students
5.	Ayisha Rahna K.P. Bharathiar University	Uplifting Tribal Students by Enhancing Social Competence, Emotional Engagement, and Assertiveness through Multimodal Therapy
6.	Santwana Mani	The Effect of MiCBT on Emotion Regulation and Impulsivity Among Adolescents
7.	Sanjay Kumar Sen University of Delhi	Identification of Problems Related to Conceptual Understanding among Teachers in Secondary Science and its Implication for Teacher Preparation Programmes
8.	Aswani R. Jeevan Farook College	Understanding the Voices from the Fringes: An Analysis of Select Tribal Language Poetry of Kerala
9.	Kalpana K. Bharathidasan University	Developing Assistive Technologies for Achieving Learning Outcomes of Students with Hearing and Vocal Impairment
10.	Bini T.V. N.S.S. Training College Ottapalam	Development and Validation of an Instructional Package Based on Bhagavad Gita for Emotional Regulation Among Secondary School Students



B. Awardees of National Awards for Innovative Practices and Experiments in Education for School and Teacher Education Institutions

List of Awarded Teachers or Teacher Educators 2018–19

S.No.	Topic or Title	Name and Designation of the Project Coordinator	Name of the School or Teacher Education Institutions
1.	Innovative Practices for Teaching Science to School Students with Learning Disabilities	Sukriti, <i>PGT Biology</i>	DAV Centenary School, Urban Estate, Jind–126102 Haryana
2.	Overcoming Maths Phobia: Blending of Ancient, Modern and Traditional Techniques in Mathematics	Praveen Kumar, <i>TGT Computer Science</i>	Government Boys Sec School No. 3, Mehrauli, New Delhi–110030
3.	High Five Approach (STPPST)	Surinder Kaur, <i>TGT (Natural Science)</i>	SKV IARI, Pusa, New Delhi–110012
4.	Importance of Positive Student-Teacher Relationship	Reena, <i>TGT Mathematics</i>	Government Co-Ed Senior Sec School, Sector 6, Rohini Delhi–110085
5.	Improvement in the Infrastructure and Basic Amenities of Schools by Securing Financial Assistance from the Alumni of Schools	Sushil Kumar, <i>Principal</i>	Primary School, Firojabad Sarsawa, Saharanpur, Uttar Pradesh–247231
6.	Learning Outcome by Concept Mapping	Shrawan Kumar Gupta, <i>Assistant Teacher</i>	Upper Primary School, Dehali Vinayak, Sewapuri, Varanasi–221405
7.	Inculcation of Environmental Awareness and Environmental Ethics Among Students to Conserve the Environment through Low Cost and Innovative Projects and Activities	Pratibha Kohli, <i>Principal</i>	Maharaja Agrasen Model School, CD-Block, Pitampura Delhi–110034
8.	Developing Handwriting Skill among KG and Ist Primary Students of Primary Schools of Jammu and Kashmir	Khadim Hussain Wani, <i>Teacher</i>	Government Middle School Mohlipora, Saidpora, Sopore Zone, Dangerpora Dist Baramullah–193201



9.	Correlation Among the Terminology of Languages and its Innovative Impact on Educands	Balram Sharma, <i>Punjabi Master</i>	Government Middle School Ramgarh, (Nawapind) Khanna, Ludhiana-141401 Punjab
10.	Project 'R.A.M.' (Room As Mathematical Tool) <i>Dwara primary kakshao mein ganith Vishay mein bachhe ke apekshith shikshan adhigam sambadhi parinam prapth karna</i>	Poonam Garg, <i>Assistant Teacher</i>	District Institute of Education and Training, Chhota Mawana, Distt. Meerut, Uttar Pradesh-250401
11.	Enhancement of Learning Achievement and Attitudinal Change Among Pre-service Teachers through Blended Learning: An Experimental Study	Harish Kumar, <i>Head of the Department</i>	Amity Institute of Behavioural and Allied Sciences, Amity University, D. Block, IIIrd Floor, Sector 125, Gautam Budh Nagar, Noida, Uttar Pradesh-201313
12.	Improving Science Teaching Skills of Prospective Teachers using 5E Model	Rajesh Kumar Pandey, <i>Teacher Educator</i>	DIET, Gyanpur Bhadohi, U.P-221401
13.	Preparing School to meet the Challenge of Inclusive Education for Children with Disabilities: A Collaborative Action Research Network.	Sneh Bansal, <i>Principal</i>	Chandigarh College of Education Landran, Mohali, Punjab-140307
14.	Web Based Collaborative Pedagogy	Usha Borkar, <i>Associate Professor</i>	Hansraj Jivandas College of Education, Dr. Madhuri Shah Campus Ramkrishna Mission Marg Khar (W), Mumbai-400052 Maharashtra
15.	Programme for Pre-service Teachers for Teaching School Subjects using ESA Model and their Teaching Competency	Lalita R. Vartak, <i>Principal</i>	Adarsha Comprehensive College of Education and Research, Erandavana Karve Road, Pune-411004 Maharashtra
16.	Use of QR Code in the Teaching Methods	Ajay Mahadev Kale, <i>PRT</i>	Zilha Parishad Primari School, Dahiwadi Tal Tasgaon, Dist Sangli, Maharashtra-416311



17.	Living the Economic Theories and Learning to Apply	Smita Das, <i>PGT Economics</i>	Navrachana School, Sama Vadodara, Gujarat-390008
18.	B.Ed. Trainees' Vocabulary with Cross Puzzles	Ch. S. Sailaja, <i>Lecturer in English</i>	SPMH College of Education, Edepally Machilipatnam-521001 Distt Krishna Andhra Pradesh
19.	Effectiveness of Self Questioning Practice as a Revolutionary Strategy towards Enhancing Ownership in Learning of Secondary School Students	Sreevinda Nair N. <i>Assistant Professor</i>	NSS Training College Pandalam, Pathanamthitta, Kerala-689501
20.	Development of a Strategy for Continuous and Comprehensive Assessment of pre-service Teacher Trainees based on Meta Cognitive Aspects	B. Sreejith, <i>Assistant Professor</i>	SCERT Kerala, Poojappura, Thiruvananthapuram Kerala-695 012
21.	Making Connections between School Maths and Everyday Experiences — Primary Students as Problem Framers — An Experiment	D. Sarala, <i>Mathematics Teacher</i>	Bhashyam Blooms School, D. No. 4-5-67/6 Ring Road, Guntur-522007 Andhra Pradesh
22.	Enhancing Science Learning Through Mobile Technology	S. Rajkumar, <i>TGT</i>	Indira Gandhi Government High School, Sugar Mill Road, Katterikuppam, Puducherry-605 502
23.	CRA Technique in Teaching Mathematics	C. Sugadev, <i>Secondary Grade Teacher</i>	Union Middle School Kattalai Marakkanam Block, Tindivanam TK, Villupuram District, Tamil Nadu-604307
24.	Secondary School Students' Problem Creating Ability from the given Number	M. Ramarao, <i>School Assistant (Maths)</i>	Z.P.P. High School, Bandarulanka, Amalapuram, Mandal E.G.Dt, Andhra Pradesh-533221
25.	Participatory Assessment Techniques for Science Learning – Innovation	V. Jayasundhar, <i>TGT</i>	Cheddilal Government High School, Abishegapakkam- 605007, Puducherry



26.	Dialogue writing ability in English of Students of A.P. Balayogi Gurukulam Schools— A Study	B. Raja Rao, <i>English Teacher or Principal</i>	A.P. Balayogi Gurukulam Kadakatla Tadepalligudem, West Godavari District Andhra Pradesh-534101
27.	Study of Habitat of the Plants through Morphological Analysis	R. Anita, <i>TGT</i>	Government High School, Mettupalayam Puducherry-605009
28.	Impact of Teaching through Shadow Puppets in Identification of Alphabets for Early Grade Students in Learning	Basanta Kumar Sahu, <i>Headmaster</i>	Sarsara Project U.P. School V.P.O. Sarsara, Distt. Bondh Odisha-762026
29.	Gamify Mathematics	Arpita Singh, <i>Assistant Teacher</i>	Kerala Public School, Kadma Uliyan, Jamshedpur, Jharkhand-831005
30.	Application of Co-curricular Activities for Promoting Interest among the Rural Odia Learners towards Learning Hindi	Dilip Kumar Badatya, <i>TGT (Hindi)</i>	Jawahar Navodaya Vidyalaya, PO Gurujang Khordha, Odisha-752057
31.	Effectiveness of Mathematical Games on Developing Mathematical Skills in the Young Learners	Sachidananda Mishra, <i>Sr. Teacher Educator</i>	DIET Dhenkanal, Dhenkanal-759001 Odisha
32.	Problem based Learning Approach in Teaching to Emphasize Knowledge Integration among Higher Secondary Students	Sandip Dutta, <i>PGT Biology</i>	JNV Goju Bordumsa Changlang, Arunchal Pradesh-792056
33.	Informal Science Teaching will have better Learning Outcomes among School going Children than the Formal Teaching	Subrahmanya Kumar, Sripada <i>Principal</i>	Delhi Public School, Duliajan Dibrugarh Assam-786602
34.	CLIX-Learning Labs makes the Different: ICT Supported Techniques for Imparting Scientific Skills in the High School Students	V. Gurunadha Rao, <i>Teacher and Project Coordinator</i>	Zilla Parishad Secondary School, Kambalapally 506103 District and Mandal: Mahabubabad Telangana State



C. Awardees of National ICT Award for School Teachers

List of 43 Selected National ICT Awards for the School Teacher 2017

S.No.	State or Autonomous Bodies	Name and Address of the Teacher
1.	Andhra Pradesh	T. Ojra Narasimha Reddy Municipal UP School Masanam Peta Kadiri, Andhra Pradesh
2.	Chhattisgarh	Chakrapal Tiwari Government Higher Secondary School, Dharashiv (Rogda) Cluster – Siund Block Nawagarh, Dist – Janjgir Champa, Chhattisgarh-495660
3.		Keshawa Ram Verma Pancham Deewan Government Girls Upper Primary School, Bhatapara Distt, Balodabazar, Chhattisgarh
4.	Gujarat	Baldevpari Javerpari Pari <i>Assistant Teacher</i> Barwala Madhyamik Shala Barvala Ta-Bhesan, Distt-Junagadh, Gujarat
5.		Rajgor Rakesh Kumar Jayantilal Panchha Anupam, Primary School AT: Panchha PO-Vithoda Ta-Kheralu Distt-Mehsana, Gujarat-384325
6.		Alpesh R. Bhatt Shantaben Dharmasih Desai High School, (Charutar Vidya Mandal) Bakrol Road, Vallabh Vidyanagar Ta and Distt.-Anand Gujarat-388120
7.	Haryana	Raj Kumar Arya <i>Post Graduate Teacher (History)</i> Government Model Sanskriti Senior Secondary School, Sec-20 Panchkula Haryana
8.		Parmod Kumar <i>Post Graduate Teacher (Psychology)</i> Directorate of Secondary Education Shiksha Sadan, Plot No – 18 Sector-5, Panchkula, Haryana
9.	Himachal Pradesh	Ramesh Chand Sharma <i>Lecturer (Commerce)</i> Government Boys Senior Secondary School, Sunder Nagar, Dist-Mandi, Himachal Pradesh
10.	Jammu and Kashmir	Hilal Ahmad Lone <i>Teacher</i> Government Girls Higher Secondary School, Main Market Kangan Ganderbal, Kashmir-191202



11.		Ayaz Raina <i>Teacher</i> Government Boys Model Higher Sec School, Thanna Mandi, Raina Mohallah, Ward No. 02, Thannamandi, Distt- Rajouri Jammu and Kashmir-185212
12.	Karnataka	Mahesha. S. <i>Assistant Master</i> Government High School, Niduvani Holenarasipura (Taluk), Hassan (Distt) Karnataka
13.		Vikranth. K. Government High School, Handli Somwarpet Taluk Kodagu Distt, Karnataka
14.		Mohan K.R. <i>Teacher</i> Government High School, Hiremarali Pandavapura Mandya (Distt), Karnataka
15.	Kerala	Rasheed Odakkal Government Vocational Higher Secondary School, Kondotty, PO – Melangadi, Distt – Malappuram, Kerala
16.		Madhavan. V. Nirmala High School, Kabanigiri, P.O. Kabanigiri, Distt – Wayanad, Pulpally, Kerala – 673579
17.		Abdurahman. P. Government L.P. School, Hosdurg Theruvath P.O., Kanhangad Distt, Kasaragod, Kerala – 671315
18.	Madhya Pradesh	Mohd. Shahid Ansari <i>Teacher</i> Government High School, Khirsadoh Block – Parasia, Distt Chhindwara, Madhya Pradesh – 480441
19.		Om Prakash Patidar <i>Senior Teacher</i> Government Higher Secondary School, Berchha Mandi, Distt – Shahjapur, Madhya Pradesh
20.		Mridu Prakash Saxena <i>Senior Head Mistress</i> Sagar Public School, 9A Saket Nagar, Bhopal, Madhya Pradesh



21.	Maharashtra	Somnath Walke Waman Zilla Parishad Primary School, Paragaon Ashti Taluka, Distt-Beed
22.		Ravindra Bhapkar Shahaji <i>Assistant Teacher</i> Zilla Parishad Primary School, Jamkhed Taluka, Ahmednagar
23.		Vikram Sonba Adsul <i>Primary School Teacher</i> Zilla Parishad Primary School, Karjat Taluja, Ahmednagar Distt.
24.	Punjab	Barinder Singh <i>Computer Faculty</i> Government Girls Senior Secondary School, Shri Hargobindpur, Distt-Gurdaspur, Punjab – 143515
25.		Amritpal Singh Government High School Bagga Kalan, The – Ajnala, Punjab – 143101
26.	Rajasthan	Devkaran Singh <i>Principal</i> Government Adarsh Senior Secondary School, Budana, Jhunjhunu, Rajasthan
27.		Manoj Kumar Pathak <i>Lecturer (Geography)</i> Government Senior Secondary School, Salumber, Udaipur, Rajasthan
28.	Tamil Nadu	G. Selvakumar Panchayat Union Primary School, Thirupputkuzhi Kanchipuram Taluk, Distt – Kanchipuram, Tamil Nadu-631551
29.		P. Karunaidoss <i>B.T. Assistant</i> Government High School, Naranapuram Sivakasi Taluk, Distt – Virudhunagar, Tamil Nadu-626189
30.		V. Lazar Ramesh <i>Computer Teacher</i> O.P.R Government Higher Secondary School, Omandhur Tindivanam Taluk, Distt – Villupuram, Tamil Nadu-604102



31.	Telangana	Umarani Chiluka Secondary Grade Teacher, Government Primary School, Lalaguda No-02, Masjid Area, GHMC Community Hall, Marredpally (M), Hyderabad-17
32.		D. Nagaraju <i>School Assistant</i> (Bio Science), Government Upper Primary School, Nawabpet Medak, Distt – Medak, Telangana-502110
33.	Uttar Pradesh	Pranesh Bhushan Mishra Upper Primary School Patha, Block, Mahroni Teh – Mahroni, Distt-Lalitpur, Uttar Pradesh-284405
34.		Ravi Pratap Singh Primary School, Dhaurahra Block, Colonel Ganj, Distt Gonda, Uttar Pradesh-271311
35.		Pratima Singh <i>Head Teacher</i> Primary School, Dhusah-1, Dhusah Balrampur, Uttar Pradesh
36.	Atomic Energy Education Society	Sona O.K. <i>Post Graduate Teacher</i> (Computer Science) Atomic Energy Central School, No-3, Tarapur Anuvikas Colony, TAPP Post, Distt-Palghar Boisar (W), Maharashtra-401504
37.	CBSE	Suma Paul Rajagiri Public School Rajagiri PO, Kalamassery, Ernakulam, Kerela-683104
38.		Taruna Mongia Indraprastha International School, Sector-10, Dwarka, New Delhi-110075
39.		Krupali Sanghvi Udgam School for Children, Opp. Sardar Patel Institute Thaltej, Ahmedabad-380054 Gujarat



40.	KVS	Asad Ahmad <i>Post Graduate Teacher (Economics)</i> Kendriya Vidyalaya, Piprai Road, Mungaoli, Ashok Nagar, Madhya Pradesh – 473443
41.		S.L. Faisal Kendriya Vidyalaya Pattom, Pattom Palace PO, Thiruvananthapuram, Kerala – 695004
42.	NVS	Ramachandra G. Deshpande <i>Trained Graduate Teacher (Social Science)</i> Jawahar Navodaya Vidyalaya, Karagudari, PO – Hangal Taluk, Distt Haveri, Karnataka-581104
43.	CISCE	Lovkesh Singh Vermani The Punjab Public School, Nabha, Near Patiala Gate, Punjab – 147201



Details of the NCERT Committees, as mentioned in MoA, for the year 2019–20

- ❑ 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. (i) Shri Prakash Javadekar
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001.
(up to 30.05.2019) |
| | (ii) Dr Ramesh Pokhriyal 'Nishank'
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001.
(w.e.f. 31.05.2019) |
| (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) Ms Rina Ray
<i>Secretary</i>
Department of School Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.07.2018 up to 15.10.2019) |
| | (ii) Amit Khare
Secretary
Department of School Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(w.e.f. 13.12.2019) |



- (iv) Four Vice Chancellors of Universities, one from each region, nominated by the Government of India
- (v) One representative of each State Government and Union Territory with a legislature who shall be the Education Minister of the State/Union Territory (or his representative) and in the case of Delhi the Chief Executive Councilor, Delhi (or his representative)
4. Nomination under process
 5. Nomination under process
 6. Nomination under process
 7. Nomination under process
 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 and 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



(vi) All members of the Executive committee not included above; and

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
39. (i) Satya Pal Singh
Minister of State
Department of Education
Ministry of Human Resource
Development, Shastri Bhawan
New Delhi-110001
(w.e.f. 12.12.2018 up to
24.05.2019)
- (ii) Sanjay Dhotre
Minister of State
Department of Education
Ministry of Human Resource
Development, Shastri Bhawan
New Delhi-110001
(w.e.f. 30.05.2019)
40. Hrushikesh Senapaty
Director
NCERT, New Delhi-110016



41. Nomination under process
42. Nomination under process
43. Nomination under process
44. Nomination under process
45. Nomination under process
46. Nomination under process
47. Joint Director
NCERT
New Delhi-110016
48. Nomination under process
49. Nomination under process
50. Nomination under process
51. (i) Sanjay Kumar
Joint Secretary (SE-II)
Ministry of HRD,
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.04.2019 up to
31.12.2019)
- (ii) Lamchonghoi Sweety Changsan
Joint Secretary (SE-II)
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 25.02.2020)
52. Darshana M. Dabral
JS and Financial Adviser
Ministry of HRD
(Department of School Education
and Literacy)
Shastri Bhawan
New Delhi-110001



- | | |
|--|--|
| <p>(vii) (a) Chairman
Central Board of
Secondary Education
Delhi (ex-officio)</p> | <p>53. Chairman
Central Board of Secondary
Education
Shiksha sadan 17
Rouse Avenue, Institutional Area
Near Bal Bhawan
New Delhi-110001</p> |
| <p>(b) Commissioner
Kendriya Vidyalaya
Sangathan
New Delhi
(ex-officio)</p> | <p>54. Commissioner
Kendriya Vidyalaya Sangathan
18, Institutional Area
Shahid Jeet Singh Marg
New Delhi-110016</p> |
| <p>(c) Director
Central Health
Education
Bureau
New Delhi
(ex-officio)</p> | <p>55. Director
Central Health Education Bureau
(DGHS)
Ministry of Health and Family
Welfare
Kotla Road
New Delhi-110002</p> |
| <p>(d) Deputy Director General
Incharge of Agricultural
Education
ICAR, Ministry of
Agriculture
New Delhi
(ex-officio)</p> | <p>56. Deputy Director General
In-charge 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. Adviser Education
Niti Aayog
Yojana Bhawan
New Delhi-110001</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

Special Invitee

Convener

59. Nomination under process

60. Nomination under process

61. Nomination under process

62. Nomination under process

63. Nomination under process

64. Nomination under process

65. Secretary
Council of Indian School
Certificate Examination
Pragati House, 3rd Floor
47 Nehru Place
New Delhi-110019

66. Harsh Kumar
Secretary
NCERT, New Delhi-110016



EXECUTIVE COMMITTEE

- | | |
|--|--|
| <p>(i) President of the Council who shall be the ex-officio President of the Executive Committee</p> | <p>1. (i) Shri Prakash Javadekar
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001.
(up to 30.05.2019)</p> <p>(ii) Dr Ramesh Pokhriyal 'Nishank'
Union Minister for Human Resource Development
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001
(w.e.f. 31.05.2019)</p> |
| <p>(ii) (a) The Minister of State in the Ministry of Education who shall be the ex-officio Vice-President of the Executive Committee</p> | <p>2. (i) Shri Satya Pal Singh
Minister of State
Department of Education
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001
(w.e.f. 12.12.2018 up to 24.05.2019)</p> <p>(ii) Shri Sanjay Dhotre
Minister of State
Department of Education
Ministry of Human Resource Development, Shastri Bhawan
New Delhi-110001
(w.e.f. 30.05.2019)</p> |
| <p>(b) A Deputy Minister of Education nominated by the President of the Council</p> | <p>3. _____</p> |
| <p>(c) Director of the Council</p> | <p>4. Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi-110016</p> |



- (d) Secretary,
Ministry of Education
ex-officio
5. (i) Ms Rina Ray
Secretary
Department of School
Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.07.2018 up to
15.10.2019)
- (ii) Amit Khare
Secretary
Department of School
Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(w.e.f. 13.12.2019)
- (iii) Anita Karwal
Secretary
Department of School
Education and Literacy
Ministry of HRD
Government of India
Shastri Bhawan
New Delhi-110001
(w.e.f. 28.04.2020)
- (iii) Chairman of the University
Grants Commission-
Member ex-officio
- (iv) Six Educationists with
known interest in school
education (two of whom
shall be school teachers)
Nominated by the President
6. D.P. Singh
Chairman
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi-110002
7. Chand Kiran Saluja
Retd. Professor
Sanskrit Promotion Foundation
11204/5, Mandir Marg
Gaushala Marg
Doriwalan
Delhi-110006
(up to 13.02.2020 – Nomination
under process)



8. Madhuree M. Shahane
C-202, DSK Gandhkosh
Near Jupiter Hospital, Baner
Pune-411045
(up to 13.02.2020)
9. Murali Monahar Putti
FF2, Shreya's Apt.
Asmanghad
Malakpet, Hyderabad
Telangana
(up to 13.02.2020)
10. B.C. Das Purkayastha
Retd. *Prinipal* of Pandu College
H.No.21, Ananda Nagar
Lane-3, Adabari
Guwahati-781012 Assam
(up to 13.02.2020)
11. Rakesh Chand Chaturvedi
Teacher
Shriji Baba Saraswati Vidya
Mandir
F-57, Govind Nagar
Near Shri Krishna Janmsthan
Mathura (UP)-281001
(up to 13.02.2020)
12. M.P. Devi
Teacher
Vyasa Vidya Peethom
Senior Secondary School
P.O. Kallekkad
District Palakkad
Kerala-678006
(up to 13.02.2020 - Nomination
under process)
- (v) Joint Director of the Council
13. Joint Director
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
Head, DEAA
NCERT, New Delhi
(up to 13.02.2020)
15. Lalchand Ram
Professor
DEL, NCERT, New Delhi
(up to 13.02.2020)
16. Pramod Kumar Dubey
Associate Professor
DEL, NCERT, New Delhi
(up to 13.02.2020)
- (vii) One representative of the Ministry of Education; and
17. (i) Sanjay Kumar
Joint Secretary (SE-II)
Ministry of HRD
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.04.2019 up to 31.12.2019)
- (ii) Lamchonghoi Sweetey Changsan
Joint Secretary (SE-II)
Ministry of HRD
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 25.02.2020)
- (viii) One representative of the Ministry of Finance, who shall be the Financial Adviser of the Council
18. Darshana M. Dabral
JS and Financial Advisor
Ministry of HRD
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110001
29. Secretary of the Council shall be the Secretary of the Executive Committee
19. Harsh Kumar
Secretary
NCERT
New Delhi-110016



FINANCE COMMITTEE

- | | | |
|--|--------------------|--|
| (i) The Director of NCERT
(ex-officio) | Chairperson | Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi-110 016 |
| (ii) Financial Advisor
MHRD
(ex-officio) | Member | Darshana M. Dabral
<i>JS and Financial Advisor</i>
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001 |
| | Member | (i) Sanjay Kumar
<i>Joint Secretary (SE-II)</i>
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.04.2019 up to
31.12.2019) |
| | | (ii) Lamchonghoi Sweety Changsan
<i>Joint Secretary (SE-II)</i>
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 25.02.2020) |
| | 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 |
| (iii) 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. Joint Director
NCERT
New Delhi-110016 |
| (iii) A nominee of the
Ministry of Education to be
nominated by the President,
NCERT | 3. Sanjay Kumar
<i>Joint Secretary (SE-II)</i>
Ministry of HRD
(Department of School Education
and Literacy)
Shastri Bhawan
New Delhi-110001
(up to 07.07.2019) |
| (iv) Four educationists to be
nominated by the President,
NCERT of whom at least one
is a Scientist | 4. Mohammad Akhtar Siddiqui
174/15, Gaffar Manjil
Jamia Nagar
New Delhi-110025
(up to 07.07.2019) |
| | 5. Vinay Kumar Pathak
<i>Vice Chancellor</i>
Dr. A.P.J. Abdul Kalam Technical
University Lucknow
Uttar Pradesh
(up to 07.07.2019) |
| | 6. Dharendra Pal Singh
<i>Director</i>
National Assessment and
Accreditation Council (NAAC),
P.O. Box No. 1075, Nagarbhavi
Bengaluru-560072
Karnataka
(up to 07.07.2019) |
| | 7. R.C. Kuhad
<i>Vice Chancellor</i>
Central University of Haryana
Jant-Pali, Mahendergarh-123029
Haryana
(up to 07.07.2019) |



- (v) One representative from the Regional Institute of Education to be nominated by the President, NCERT
- (vi) One representative of the National Institute of Education Delhi to be nominated by the President, NCERT
- (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
- (viii) Financial Advisor
NCERT
- (ix) Secretary, NCERT
Member-convenor
8. Nityanand Pradhan
Principal
Regional Institute of Education
Shyamla Hill, Bhopal
(up to 07.07.2019)
9. A.K. Wazalwar
Head, DEK
Sri Aurobindo Marg
New Delhi-110 016
(up to 07.07.2019)
10. Harish Kumar Meena
(Elected representative Academic Staff)
DESS, NCERT
New Delhi
11. (i) Ravinder Singh
(Elected representative Non-academic Staff)
NCERT, New Delhi
(up to 19.07.2019)
- (ii) Dinesh Kumar Meena
(Elected representative Non-academic Staff)
NCERT, New Delhi
(w.e.f. 20.07.2019)
12. Darshana M. Dabral
JS and Financial Advisor
Ministry of HRD
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110 001
13. Harsh Kumar
Secretary
NCERT
New Delhi-110016



BUILDING AND WORKS COMMITTEE

- | | |
|---|---|
| (i) Director, NCERT
Chairman (ex-officio) | Hrushikesh Senapaty
Director
NCERT, New Delhi-110016 |
| (ii) Joint Director, NCERT
Vice-Chairman, (ex-officio) | Joint Director
NCERT, New Delhi-110016 |
| (iii) Chief Engineer, CPWD
or her/his nominee (Member) | Superintend Engineer
DCC XI, CPWD
Room No. 127, 1st Floor
A-Wing, Pushpa Bhawan
Madangir
New Delhi |
| (iv) A representative of Ministry of
Urban Development (Works) | Director (IFD)
Ministry of Urban Development
Finance Division
Nirman Bhawan
New Delhi-110 001 |
| (v) The Consulting Architect of the
NCERT | Chief Architect (NDR)
CPWD
303, 'A' Wing
Nirman Bhawan
Maulana Azad Road
New Delhi-110011 |
| (vi) Financial Advisor of the
Council or her/his nominee | Darshana M. Dabral
<i>JS and Financial Advisor</i>
Ministry of HRD
(Department of School Education
and Literacy)
Shastri Bhawan
New Delhi-110 001 |
| (vii) A nominee of the Ministry of
HRD | (i) Sanjay Kumar
<i>Joint Secretary (SE-II)</i>
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 01.04.2019 till
31.12.2019) |



- | | | | |
|--------|--|---|--|
| (ii) | Lamchonghoi Sweety
Changsan
<i>Joint Secretary (SE-II)</i>
Ministry of HRD
(Department of School
Education and Literacy)
Shastri Bhawan
New Delhi-110001
(w.e.f. 25.02.2020) | | |
| (viii) | 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
(up to 02.06.2019) | |
| (ix) | 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
(up to 02.06.2019) | |
| (x) | A Member of Executive
Committee
(Nominated by the President) | Chand Kiran Saluja
<i>Retd. Professor</i>
Sanskrit Promotion Foundation
11204/5, Mandir Marg
Gaushala Marg
Doriwalan
Delhi-110006
(up to 13.02.2020) | |
| (xi) | Secretary, NCERT | 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
<i>Professor</i>
Department of Management Studies
Pondicherry University, Puducherry | Member |
| (ii) Suresh Tandon
<i>Former Vice-Chairman</i>
Punjab School Education Board (PSEB)
Vidya Bhawan, Phase-8, S.A.S. Nagar, Mohali | Member |
| (iii) Mahesh Chand Sharma
School of Education
IGNOU, New Delhi | Member |
| (iv) Shashikala Gulabrao Wanjari
<i>Vice-Chancellor</i>
Shreemati Nathibai Daodar Thackersey
Women's University, (SNDTU), Mumbai | Member |
| (v) H.C. Verma
<i>Professor of Physics (Retd.)</i>
IIT-Kanpur, Uttar Pradesh | Member |

Five Directors of SIEs and SCERTs and 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) Director
State Council of Educational Research and Training
(SCERT), Andhra Pradesh | Member |

Members from the NCERT

- | | |
|---|--------|
| (i) Joint Director
CIET
NCERT, New Delhi | Member |
| (ii) Rajendra Pal
CIET
NCERT, New Delhi | Member |
| (iii) Joint Director
PSSCIVE
Shyamla Hills
Bhopal – 462013
Madhya Pradesh | Member |
| (iv) Mridula Saxena
PSSCIVE
Shyamla Hills
Bhopal – 462013
Madhya Pradesh | Member |
| (v) Principal
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) Principal
Regional Institute of Education
Shyamla Hills
Bhopal-462013 | Member |



(viii) Dean of Instructions Regional Institute of Education Shyamla Hills Bhopal-462013	Member
(ix) Principal 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) Principal Regional Institute of Education Manas Gangotri Mysuru-57006	Member
(xii) Dean of Instruction Regional Institute of Education Manas Gangotri Mysuru-57006	Member
(xiii) Principal 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) Head Department of Elementary Education (DEE) NCERT, New Delhi	Member
(xvi) A.K. Rajput <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
(xviii)	K.C. Tripathi <i>Professor</i> Department of Education in Languages (DEL) NCERT, New Delhi	Member
(xix)	<i>Head</i> Department of Education of Groups with Special Needs (DEGSN) NCERT, New Delhi	Member
(xx)	Anita Julka <i>Professor</i> Department of Education of Groups with Special Needs (DEGSN) NCERT, New Delhi	Member
(xxi)	<i>Head</i> Department of Gender Studies (DGS) NCERT, New Delhi	Member
(xxii)	Poonam Agrawal <i>Professor</i> Department of Gender Studies (DGS) NCERT, New Delhi	Member
(xxiii)	<i>Head</i> Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
(xxiv)	Neeraja Rashmi <i>Professor</i> Department of Education in Social Sciences (DESS) NCERT, New Delhi	Member
(xxv)	<i>Head</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
(xxvi)	Sunita Farkya <i>Professor</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member



(xxvii) <i>Head</i> RMSA Project Cell NCERT, New Delhi	Member
(xxviii) Sarad Kr. Pandey <i>Associate Professor</i> NCERT, New Delhi	Member
(xxix) <i>Head</i> Educational Survey Division (ESD) NCERT, New Delhi	Member
(xxx) Sridhar Srivastava <i>Professor</i> Educational Survey Division (ESD) NCERT, New Delhi	Member
(xxxi) <i>Head</i> Department of Teacher Education (DTE) NCERT, New Delhi	Member
(xxxii) B.P. Bhardwaj <i>Professor</i> Department of Teacher Education (DTE) NCERT, New Delhi	Member
(xxxiii) <i>Head</i> Department of Educational Psychology and Foundations of Education (DEPFE) NCERT, New Delhi	
(xxxiv) Prabhat Kr. Mishra <i>Associate Professor</i> NCERT, New Delhi	Member
(xxxv) <i>Head</i> Department of Educational Research (DER) NCERT, New Delhi	Member
(xxxvi) N.K. Gupta <i>Professor</i> Department of Educational Research (DER) NCERT, New Delhi	Member
(xxxvii) <i>Head</i> International Relations Division (IRD) NCERT, New Delhi	Member



(xxxviii)	Chairperson Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xxxix)	M. Samantaray <i>Deputy Librarian</i> Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xl)	Head Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xli)	Ashita Raveendran <i>Assistant Professor</i> Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xlii)	Head Department of Curriculum Studies (DCS) NCERT, New Delhi	Member
(xliii)	Anita Nuna <i>Professor</i> Department of Curriculum Studies (DCS) NCERT, New Delhi	Member
(xliv)	Head Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
(xlv)	Pawan Sudhir <i>Professor</i> Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
(xlvi)	Head Department of Educational Kits (DEK) NCERT, New Delhi	Member
(xlvii)	R.K. Parashar <i>Professor</i> Department of Educational Kits (DEK) NCERT, New Delhi	Member
(xlviii)	Head 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
- (iv) Dean (Coordination)
NCERT, New Delhi
- (v) Chief Accounts Officer (CAO)
NCERT, New Delhi



EDUCATIONAL RESEARCH AND INNOVATIONS COMMITTEE

- (i) H.K. Senapaty Chairperson
Director, NCERT
- (ii) Joint Director Co-Chairperson
- (iii) A.P. Behera
Joint Director, CIET
- (iv) Rajesh P. Khambayat
Joint Director, PSSCIVE, Bhopal

External Members

- (v) T.S. Naidu
Professor-cum-Director
Centre for Social Exclusion and Inclusive Policy
Pondicherry University
Kalapet, Puducherry-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 Chacellor
 Yashwanrao 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-110055

Representatives of State Council of Educational Research and Training

- (xiii) T.S. Joshi
Director
 SCERT, Vidyabhawan, Sector-12
 Gandhinagar-382016
 Gujarat
- (xiv) Chhanda Ray
Director
 SCERT
 25/3, Ballygunge Circular Road
 Kolkata-700 019
 West Bengal

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) Head, DESM
NCERT, New Delhi
- (xx) Head, DESS
NCERT, New Delhi
- (xxi) Head, DEE
NCERT, New Delhi
- (xxii) Head, PMD
NCERT, New Delhi
- (xxiii) Head, DCS
NCERT, New Delhi
- (xxiv) (a) Rajendra Pal
Head, DER
NCERT, New Delhi
(Upto 09/03/18)
- (b) Anjum Sibia
Head, DER
NCERT, New Delhi
(From 12/03/18)



**ACADEMIC COMMITTEE OF
NATIONAL INSTITUTE OF EDUCATION**

(i) **Chairperson**

Saroj Bala Yadav

Dean (Academic)

(ii) **External Experts**

(a) M.A. Sudhir

Professor Emeritus (UGC)

Gandhigram Rural Institute, Dindigul
Tamil Nadu

(b) Ajit K. Mahanty

Professor

HIG-67, Phase VII
Sailashree Vihar
Bhubaneswar-21

(c) M.A. Siddiqui

Former Chairperson (NCTE)

Faculty of Education
Jamia Millia Islamia
New Delhi-11025

(d) G. Ravindra

Ex-Joint Director, NCERT
New Delhi

(e) Venita Kaul

34, SFS, DDA Flats
Munirka Enclave
New Delhi-110067

(iii) **Head of NIE Departments/Divisions/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)

Annual Report 2019-2020



- (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) **Heads of the Institutes (CIET and PSSCIVE)**
- (a) Joint Director, Central Institute of Educational Technology
 - (b) Joint Director, PSSCIVE, Bhopal
- (v) **Faculty from Institutes**
- (a) Indu Kumar, *Professor*, Central Institute of Educational Technology
 - (b) Mridula Saxeena, *Professor*, PSSCIVE, Bhopal
- (vi) **Special Invitees**
- (a) Dean (Research)
 - (b) Dean (Coordination)
- (vii) **Faculty from NIE Departments/Divisions/Cell**
- (a) K.C. Tripathi, *Professor*, Department of Education in Languages
 - (b) Anita Julka, *Professor*, Department of Education of Groups with Special Needs
 - (c) Sunita Farakya, *Professor*, Department of Education in Science and Mathematics
 - (d) Sarad Kumar Pandey, Rashtriya Madhyamik Shiksha Abhiyaan Project Cell
 - (e) Sridhar Srivastava, *Professor*, Educational Survey Division
 - (f) B.P. Bhardwaj, *Professor*, Department of Teacher Education
 - (g) Prabhat Kumar Mishra, Department of Educational Psychology and Foundations of Education
 - (h) Mridula Saxena, *Professor*, PSS Central Institute of Vocational Education, Bhopal
 - (i) Moortimattee Samantray, Library and Documentation Division
 - (j) Ashita Raveendran, Planning and Monitoring Division
 - (k) Anita Nuna, *Professor*, Department of Curriculum Studies
 - (l) Pawan Sudhir, *Professor*, Department of Education in Arts and Aesthetics
 - (m) R.K. Parashar, *Professor*, Department of Education in Science and Mathematics



**MANAGING COMMITTEE OF REGIONAL INSTITUTE
OF EDUCATION, AJMER**

(i) Vice Chancellor
M.D.S. University
Ajmer Chairman

(ii) Principal
Regional Institute of Education
Ajmer Vice-Chairman

A Nominee from the Education Department of Each of the States and UTs

(iii) The Director
Secondary Education
Government of Rajasthan
Bikaner, Rajasthan Member

(iv) Regional Director
Education (South), New Delhi Member

(v) The Director
School of Education
Government of Jammu and Kashmir, Jammu Member

(vi) The Director, SCERT
Nishat Ganj, Lucknow, Uttar Pradesh Member

(vii) The JD of Higher Education
(C-1), Himachal Pradesh Member

(viii) The Director, SCERT
Uttarakhand Member

(ix) The Director, SCERT
Punjab Member

(x) The Director, SCERT
Gurugram, Haryana Member

(xi) The Director, SCERT
Chandigarh Member

Two Experts Nominated by the President, NCERT as Members

(xii) R.C Kuhad
Vice Chancellor
Central University of Haryana Member



- (xiii) V. Ramgopal Rao
Director
IIT, Delhi Member

Nominee of the Director, NCERT

- (xvi) 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

- (xv) Head Member
Department of Education in Science and Mathematics
RIE, Ajmer
- (xvi) Head Member
Department of Education
RIE, Ajmer

Such other members are Required to be Included by the Stipulation of the University to which the Institute is Affiliated

- (xvii) Nominee of Vice Chancellor Member
M.D.S. University
Ajmer



**MANAGING COMMITTEE OF REGIONAL INSTITUTE
OF EDUCATION, BHOPAL**

- | | |
|---|---------------|
| (i) Vice Chancellor
Barkatulla University
Bhopal | Chairman |
| (ii) Principal
Regional Institute of Education
Bhopal | Vice Chairman |

A Nominee of the Education Department of Each of the States and UTs

- | | |
|--|--------|
| (iii) Director, SCERT
Bhopal, Madhya Pradesh | Member |
| (iv) Director, SCERT
Raipur, Chhattisgarh | Member |
| (v) Director, MSCERT
Pune, Maharashtra | Member |
| (vi) Director, SCERT
Goa | Member |
| (vii) Director, GCERT
Gandhinagar, Gujarat | Member |
| (viii) Assistant Director of Education
U.T. of Daman and Diu
Daman | Member |
| (ix) Assistant Director of Education
U.T. of Dadar and Nagar Haveli
Silvassa | Member |

Two Experts Nominated by the President, NCERT as Members

- | | |
|--|--------|
| (x) Vasudha Kamath
Vice Chancellor
SNDT Women's University
Mumbai | Member |
| (xi) Geeta Bali
Chairman
NIT Bhopal | Member |



Nominee of the Director, NCERT

- (xvii) To be decided on receipt of scheduled date of meeting
of the Managing Committee from the Principal

Two Heads of the Departments of the Regional Institutes Nominated by the Director

- | | |
|---------------------------------|--------|
| (xiii) Head, DE
RIE, Bhopal | Member |
| (xiv) Head, DESM
RIE, Bhopal | Member |

Such Other Members are Required to be Included by the Stipulation of the University to which the Institute is Affiliated

- | | |
|--|--------|
| (xv) Nominee of Vice Chancellor
Barkatulla University
Bhopal | Member |
|--|--------|



**MANAGING COMMITTEE OF REGIONAL INSTITUTE
OF EDUCATION, BHUBANESWAR**

- | | |
|--|---------------|
| (i) Vice Chancellor
Utakal University
Bhubaneswar | Chairman |
| (ii) Principal
Regional Institute of Education
Bhubaneswar | Vice-Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | |
|---|--------|
| (iii) Director
T.E. and SCERT
President
West Bengal Board of Primary Education
Salt Lake, Kolkata-91 | Member |
| (iv) Principal
State Institute of Education
Port Blair, Andaman and Nicobar Islands | Member |
| (v) Deputy Director
Directorate of Primary Education
Department of Human Resources Development
Government of Jharkhand
Ranchi | Member |
| (vi) Assistant Director
Directorate of Research and Training
Department of Education
Patna, Bihar | Member |

Two Experts Nominated by the President, NCERT

- | | |
|--|--------|
| (vii) 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 |
| (viii) R.V. Rajkumar
<i>Director</i>
IIT, Bhubaneswar | Member |



Nominee of the Director, NCERT

- | | |
|---------------------------------------|--------|
| (x) Head
D.E.
RIE, Bhubaneswar | Member |
| (xi) Head
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

- | | |
|---|--------|
| (xii) 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**

- (i) Vice Chancellor
Mysore University
Mysuru Chairman
- (ii) Principal
Regional Institute of Education
Mysuru Vice-Chairman

A Nominee of the Education Department of each of the States and UTs

- (iii) Director
DSCERT
Bengaluru-560085
Karnataka Member
- (iv) Director
SCERT, Andhra Pradesh
Opp. L.B. Stadium, E-gate
Hyderabad-500001 Member
- (v) Director
SCERT, Telangana
Opp. L.B. Stadium, E-gate
O/o the Commission of Agriculture
Hyderabad Member
- (vi) Director
SCERT
College Road, DPI Campus
Chennai-600006
Tamil Nadu Member
- (vii) Director
SCERT
Vidyabhavan
Poojappura, P.O. Thiruvananthapuram
Kerala-695012 Member

Two Experts Nominated by the President, NCERT

- (viii) M.K. Sridhar
Canara Bank School of Management Studies
Post-Graduate Department of Management Studies
Bangalore University, Central College Campus
Bengaluru Member



- | | | |
|------|---|--------|
| (ix) | Rama Subramaniam
IIT, Bombay
Coordinator for Research in Science and Technology
in Sanskrit Literature | Member |
|------|---|--------|

Nominee of the Director, NCERT

- | | | |
|-----|---|--------|
| (x) | 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

- | | | |
|-------|-----------------------------|--------|
| (xi) | Head
DE
RIE, Mysuru | Member |
| (xii) | Head
DESM
RIE, Mysuru | Member |

Such Other Members as are Required to be Included by the Stipulation of the University to which the Institute is Affiliated

- | | | |
|--------|---|--------|
| (xiii) | Nominee of Vice Chancellor
Mysore University
Mysuru | 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 NORTH–EAST REGIONAL INSTITUTE OF
EDUCATION, UMIAM (MEGHALAYA)**

- | | |
|---|---------------|
| (i) Vice Chancellor
North–East Hill University
Shillong | Chairman |
| (ii) Principal
NERIE, Umiam
Meghalaya | Vice–Chairman |

A Nominee of the Education Department of each of the States and UTs

- | | |
|--|--------|
| (iii) Director
DHRT
Shillong | Member |
| (iv) Director
School Education
Itanagar | Member |
| (v) Director
SCERT
Assam | Member |
| (vi) Director
HRDD (School Education)
Sikkim | Member |
| (vii) Director of School Education
Tripura | Member |
| (viii) Director of School Education
Mizoram | Member |
| (ix) Director
SCERT
Manipur | Member |
| (x) Director
SCERT
Nagaland | Member |



Two Experts Nominated by the President, NCERT

- | | | |
|-------|---|--------|
| (xi) | Sri Krishna Srivastava
Vice-Chancellor
NEHU, Shillong | Member |
| (xii) | Roze Millia Bethew
Former Chairman
UPSC | Member |

Nominee of the Director, NCERT

- | | | |
|--------|---|--------|
| (xiii) | 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

- | | | |
|-------|------------------------------|--------|
| (xiv) | Head
DESH
NERIE, Umiam | Member |
| (xv) | 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

- | | | |
|-------|--|--------|
| (xvi) | 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, 2020 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	333	52	15.62%	23	6.91%	28	8.41%	3	0.90%
B	685	384	73	19.01%	44	11.46%	53	13.80%	6	1.56%
C and D	1474	533	137	25.70%	65	12.20%	74	13.88%	13	2.44%
Total	2833	1250	262	20.96%	132	10.56%	155	12.40%	22	1.76%





NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

Receipts and Payments Account for the Year Ended on 31 March, 2020

Receipts	Current Year 2019-20	Previous Year 2018-19	Payments	Current Year 2019-20	Previous Year 2018-19
1. Opening Balances			1. Expenses		
(a) Cash Balances			(a) Establishment Expenses	1,99,35,34,311	2,09,49,94,442
(b) Bank Balances			(b) Academic Expenses	2,82,59,97,130	2,04,73,94,157
(i) In current accounts			(c) Administrative Expenses	1,47,78,22,936	1,49,66,50,374
(ii) In Deposit accounts			(d) Transportation Expenses	1,36,96,449	1,33,03,165
(iii) In Saving accounts	48,64,11,080	1,31,32,57,258	(e) Repairs and Maintenance Expenses	39,01,58,592	32,04,44,093
			(f) Prior Period Expenses	-	-
2. Grants Received					
(a) From Government of India	2,76,05,00,000	2,83,54,05,000	2. Payments against Earmarked/Endowment Funds	-	-
(b) From State Government of India					
(c) From Other Sources (Amount reimbursed from UNFPA/AEP)	-	5,20,449	3. Payments against Sponsored Projects/Schemes	24,14,00,195	19,57,37,366
(Grants for capital and revenue exp/to be shown separately if available)					



Annual Report 2019–2020

				4. Payments against Sponsored Fellowships/ Scholarships	69,58,116	81,23,577
3. Academic Receipts	11,70,45,781	6,92,80,639		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	29,46,85,606	19,36,90,405		6. Term Deposits with Scheduled Banks	7,45,00,00,000	6,71,87,30,830
6. Receipts against sponsored Fellowships and Scholarships	-	-		7. Expenditure on Fixed Assets and Capital Works-in-Progress:		
7. Income on Investments:				(a) Fixed Assets	30,08,56,283	27,63,86,685
(a) Earmarked/ Endowment funds	-	-		(b) Capital Work-in-Progress	-	-
(c) Other Investments	10,08,34,408	7,96,69,100		8. Other Payments including statutory payments	78,67,74,711	64,43,18,817



8. Interest received on						
(a) Bank Deposits	35,88,82,328	25,50,71,679	9. Refunds of Grants	-	-	-
(b) Loans and Advances	22,00,403	30,93,303				
(c) Savings Bank Accounts	3,35,66,523	4,31,26,106	10. Deposits and Advances	72,54,266	66,37,365	
(d) Bank Guarantees	-	-				
9. Investments encashed	-	-	11. Other Payments	7,32,64,05,651	6,59,11,74,611	
10. Term Deposits with Scheduled Banks encashed	6,44,00,00,000	5,41,37,30,830	12. Closing balances:			
			(a) Cash in hand	-	-	
11. Other Income (Including Prior Period income)	5,05,60,63,865	3,40,01,19,766	(b) Bank Balances	-	-	
			In Current Accounts	-	-	
12. Deposits and Advances	2,60,83,580	88,54,574	In Savings Accounts	1,20,43,56,967	48,64,11,080	
			In Deposit Accounts	-	-	
13. Miscellaneous Receipts including Statutory Receipts	3,48,16,77,329	57,93,91,422				
14. Any Other Receipts	4,86,72,64,704	6,70,50,96,031				
Total	24,02,52,15,607	20,90,03,06,562	Total	24,02,52,15,607	20,90,03,06,562	

Sd/-

Chief Accounts Officer
NCERT, New Delhi 110 016

Sd/-

Secretary
NCERT, New Delhi 110 016

Separate Audit Report of the Comptroller & Auditor General of India on the Accounts of the National Council of Educational Research and Training (NCERT) for the year ended 31 March 2020

1. We have audited the attached Balance Sheet of the National Council of Educational Research and Training (NCERT) as at 31 March 2020, Income & Expenditure Account and Receipts & Payment 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. Out of these, accounts of three units were audited and comments included in the report. These financial statements are the responsibility of the NCERT'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 observations 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 & Expenditure Account and Receipts & Payments Account dealt with by this report have been broadly drawn up in the format prescribed by the Ministry of Education, Government of India.
 - (iii) In our opinion, proper books of accounts and other relevant records, subject to observations in the report, have been maintained by NCERT 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 Current Assets (Schedule-7) - ₹1106.89 crore**

The stock of publication amounting to ₹5.05 crore which was in transit from one godown to other godown as on 31 March 2020 was not taken in the current assets. This has resulted in understatement of Current Assets and Capital Fund by ₹5.05 crore each.

A.1.2 Loans, Advances and Deposits (Schedule 8) – ₹182.98 crore**Advances & other amounts recoverable: ₹143.14 crore**

(i) The above includes advance deposited with CPWD under Capital head amounting to ₹4.03 crore of **NCERT** Headquarters

(a) Out of ₹4.03 crore above, the work amounting to ₹2.27 crore has been completed but the same has not been included in Fixed Assets. This has resulted in overstatement of Loans, Advances & Deposits and understatement of Fixed Assets by Rs.2.27 crore. The date of completion/put to use of these works was not furnished to audit.

(b) **Further**, out of ₹4.03 crore, the details record for an amount of ₹1.70 crore were not furnished to audit due to which audit could not verify the Advances of ₹1.70 crore.

(ii) The Advances & Other amount recoverable includes debit balances in sponsored projects amounting to ₹7.26 crore whereas as per the details of sponsored projects placed in the accounts the amount was ₹6.63 crore. The details of differential amount of ₹63.47 lakh, which pertains prior to 2015-16, was not made available to Audit.

Similarly the above includes deposit with DAVP of ₹11.42 lakh in respect of RIE, Bhopal. The same amount has been shown deposited since 2008 but no details are available with the Institute.

In the absence of details, the amount of ₹74.89 lakh could not be verified in audit.

B. Income and Expenditure Accounts**B.1 Expenditure****B.1.1 Other Expenses (Schedule 21) – ₹0.03 lakh**

Sundry debtors included ₹36.60 lakh which were outstanding since 2004-05. As the realisation from these sundry debtors seems bleak, the provision for doubtful debts should have been made in accounts. Failure to do so has resulted in understatement of Other Expenses (Provisions of Doubtful Debts) and overstatement of Sundry Debtors by ₹36.60 lakh.

This is being pointed out since 2012-13 but no action has been taken by NCERT.

C. GPF/CPF Accounts**C.1 Assets****C.1.1 Investment- ₹140.93 crore**

The above includes investment of ₹1.60 crore in bonds of Punjab Financial Corporation (PFC) which have matured on 1/12/2016. The



amounts has neither been received nor was any provision for the same made. This has resulted in overstatement of Investment and understatement of Expenditure by ₹1.60 crore. The issue has been pointed out in last three years however no action has been taken in this regard.

C.1.2 Accrued interest – ₹5.25 crore

The above includes accrued interest of ₹77 lakh for the period from December 2016 to March 2020 on investment of ₹1.60 crore made in PFC bonds. Although principal amount of the bond which matured on 1 December 2016 has not been received, the Council kept on recognising interest for the same. No provision for the same has been made in the accounts. This has resulted in overstatement of Accrued Interest and understatement of Expenditure (Provision for doubtful debt) by ₹77 lakh each. The issue has been pointed out in last three years however no action has been taken in this regard.

D. NPS Accounts

D.1 Receipt and Payment Account

- (i) FDRs matured during the year amounting to ₹37.23 lakh and interest received on FDRs amounting to ₹1.90 lakh has not been shown as Receipts. Similarly FDRs made during the year amounting to ₹39.13 lakh has not been shown as Payments. This has resulted in understatement of Receipts & Payments by ₹39.13 lakh.
- (ii) “Non-Pran Receipt to be received” amounting to Rs.35.64 lakh has been taken as receipt in the Receipts and Payments account of NPS instead of being shown under Current Assets. This has resulted in overstatement of Receipts and overstatement of cash at bank with consequent understatement of Current Assets by Rs.35.64 lakh.

E. General

E.1 Consolidation of accounts

All the constituent units of NCERT are preparing Receipts and Payment Accounts every month and forwarding the same to the NCERT Hqrs for consolidation. On the basis of Receipts and Payment Accounts received from all the units, at the end of the financial year, consolidated Receipts and Payment Accounts, Balance Sheet and Income and Expenditure accounts are prepared at NCERT Hqrs. All the constituents units should prepare the complete set of accounts at the end of the financial year i.e. Receipts & Payments Account, Income & Expenditure Account and Balance Sheet from which the consolidated accounts should be prepared at NCERT Hqrs for better reporting of the accounts of NCERT. This is being pointed out since 2014-15 but remedial action has not been taken.

E.2 Fixed Assets (Schedule 4) – Rs.161.21 crore

The above does not include land and building owned by Regional Production and Distribution Centre (RPDC), Bengaluru (unit of NCERT). As the value of land and building not furnished to audit, the impact of the same on the accounts is not ascertainable.

This was pointed out in the previous year report but NCERT has not yet complied.



F. Grant- in-aid

During 2019-20 NCERT received grant-in-aid of Rs 276.05 crore (Capital: ₹24.57 crore and Revenue: ₹251.48 crore) out of which grant of Rs 15.10 crore (Capital: Rs.NIL and Revenue: Rs.15.10 crore) was received in the month of March, 2020. It had an opening balance of Rs 13.60 crore (Capital: ₹0.43 crore and Revenue: ₹13.17 crore) as on 1 April 2019. It has its own receipt ₹65.52 crore (Capital: ₹3.04 crore and Revenue: ₹62.48 crore). It utilised ₹348.47 crore (Capital: ₹28.03 crore and Revenue: ₹320.44 crore) leaving an unspent balance of ₹6.69 crore (Capital: Rs.NIL and Revenue: ₹6.69 crore) as on 31st March 2020.

It also received grant of ₹29.47 crore for sponsored/specific projects from Ministry of Education and other agencies during the year and had an opening balance of ₹12.62 crore in these projects. Out of the total grant received, ₹8.98 crore was received, in the month of March 2020. Out of the total of Rs.42.09 crore, an expenditure of Rs.24.14 crore was incurred by the Council during the year on these projects leaving a balance of Rs.17.95 crore as on 31st March 2020.

G. Management letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, National Council of Educational Research and Training (NCERT) through a Management Letter issued separately for remedial/corrective action.

- (iii) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income & Expenditure Account and Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.
- (iv) 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 2020; and
 - (b) and in so far as it relates to Income & Expenditure Account of the deficit for the year ended on that date.

For and on behalf of the C&AG of India

Place: New Delhi

Date:

Director General of Audit
(Home, Education & Skill Development)



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 2019-20 but no unit was audited.
- Proper follow up action was not taken to get the objections settled as 409 internal audit paras were outstanding as on 31.03.2020.

2. Adequacy of internal control System

The Internal control system of NCERT is not adequate as:

- 39 external audit paras in respect of NCERT Hqrs. were outstanding for settlement as on 31.03.2020.
- Huge unreconciled amount in the bank reconciliation statement of the Publication Division of NCERT.
- Fixed asset register of NCERT Hqrs was not maintained in the prescribed format.

3. System of physical verification of fixed assets

- The physical verification of Land and Buildings of NCERT (Hqrs.) has been conducted up to October 2017.
- The physical verification of other Fixed Assets of NCERT (Hqrs.) has been conducted up to 2016-17.
- Physical verification of fixed assets is not being done regularly by the units of NCERT.

4. System of physical verification of inventory

- The physical verification of stationery and non-consumables have been conducted up to 2017-18.
- The physical verification of inventory of Publication division was conducted up to September 2019.

5. Regularity in payment of statutory due

As per accounts, no payment over six months in respect of statutory dues was outstanding on 31.03.2020.



Publications Released during the year 2019–20

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*
- *Doorva 3*



- *Bharat Ki Khoj (Hindi Supplementary Reader)*
- *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)*
- *Introduction and Communication Technology 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*
- *Word and Expression, Class X*

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*
 - *Abhivyakti aur Madhyam*
 - *Psychology*
 - *Manovigyan ka Parichay*
 - *Computers and 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*
 - *Information Practices, Class XI*
 - *Biotechnology, Class XI*
 - *Computer Science, Class XI*
- 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*
- *Ganit Bhag-I*
- *Ganit Bhag-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 Paristhithiki evam Parivar Vigyan Bhag – I,*
- *Suksham Rasayan Pryogshala Kit Nirdeshika kaksha XI aur XII*
- *Manav Paristhithi evam Parivar Vigyan, Bhag-2, Kaksha – XII*

URDU TEXTBOOKS

Class I

- *Riyazee ka Jadoo 1*
- *Ibtedai Urdu 1*

Class II

- *Riyazee ka Jadoo 2*
- *Ibtedai Urdu 2*

Class III

- *Riyazee ka Jadoo 3*
- *Aas Pass (EVS)*
- *Ibtedai Urdu 3*

Class IV

- *Riyazee ka Jadoo 4*
- *Ibtedai Urdu 4*
- *Aas Pass (EVS)*

Class V

- *Riyazee Ka Jadoo 5*
- *Ibtedai Urdu 5*
- *Aas Pass (EVS)*

Class VI

- *Apni Zaban 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*
- *Samaji 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 Zindagi*
- *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 Aur Kam*
- *Siyasi Nazaryah*
- *Karobari Uloom*
- *Nafsiyat ka Taruf*
- *Tabai Jugrahiya ke Mubodiyat*
- *Jugrahiya 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 Jugrafiya ke Bunyadi Usool*
- *Jugrafiya 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*
- *Urdu ki Adabi Asnaf for Secondary and Senior Secondary Stages*

RESEARCH REPORTS AND MONOGRAPHS

- *Uchch Prathmik Vigyan Kit Manual Kaksha 6, 7, aur 8*
- *Mathematics Learning Kit, User's Manual I and II*
- *Molecular Model Kit*



- *Rehnuma Kitab Bara-e-Riyazi Kit for Classes I and II*
- *Manual of Upper Primary Kit, Classes VI, VII and VIII*
- *Rehnuma Kitab Bara-e-Riyazi Kit*
- *Rehnuma Kitab Bara-e-Sanwi Riyazi Kit*
- *The Role of Begums of Bhopal in Girls Education*
- *Glimpses of Plant Life Part – I*
- *Vigyan Adhigam Samgri Uchch Prathmik Istar par Parshav pravesh ke liye kaksha 6–8*
- *National Curriculum Framework – 2005*
- *Continuous and Comprehensive Evaluation Guidelines*
- *The Pre-School Curriculum*
- *Training Material for Teacher Educators on Gender Equality and Empowerment, Vol. - I*
- *Training Material for Teacher Educators on Gender Equality and Empowerment, Vol. - II*
- *Training Material for Teacher Educators on Gender Equality and Empowerment, Vol. – III*
- *Guideline for Preschool Education*
- *Kaho Kahani Uchch Prathmik istar ke liye Hindi*
- *Yog Madhyamik Istar*
- *Prarambhik Balyavastha Dekhrehk evam Shiksha (ECCE) Jagrukta Sansadhan Package*
- *Sanitation and Hygiene Upper Primary Stage*
- *Skills in Environment Studies Through Language and Math in Early Grades (Resource Book)*
- *Social Thinkers of Modern India Contemporaries of Swami Vivekanand*
- *Veer Gatha, Story of Parmveer Chakra Awardees*
- *Simmi's Journey Towards Cleanliness Primary Stage*
- *Shikshan aur Adhigam ki Srijnatmak Paddhtiyan (Madhyamik istar ke Shikshakon ke liye Sandarshika)*
- *Vigyan Shiksha Shastra, B.Ed. Pathyakram ke liye Pathyapustak Bhoutik Vigyan Bhag – 2*
- *NISHTHA, Training Package*
- *Go Green (Children's Literature Series)*
- *Hello Rain (Children's Literature Series)*
- *Chandu's Chaat (Children's Literature Series)*
- *The Kite (Children's Literature Series)*
- *Veer Gatha Parmveer Chakra Vijetaon ki Kahaniyan*
- *Swine Flu, Resource Material on Management Disasters*
- *Early Childhood Education Programme*
- *Pariyojna Pustika, Paryavaran Karen, Sikhen aur Batayen, Kaksha – VI*
- *Pariyojna Pustika, Paryavaran Karen, Sikhen aur Batayen, Kaksha – VII*
- *Fire and Stampade, Resource Material on Management Disasters*
- *Tota aur Billi (Pathya Parichay Pustak Mala)*
- *Bahadur Dost (Pathya Parichay Pustak Mala)*
- *Adhunik Bharat ke Samajik Vicharak, Swami Vevekanand ke Samkalin*
- *Chidiyaghar ki Sair (Pathya Parichay Pustak Mala)*
- *Suno Kahani Uchch Prathmik Istar ke Liye*



- *Satranji Gend (Pathya Parichay Pustak Mala)*
- *Rasoi Ghar*
- *Patang ke Pench*
- *We Are One*
- *Flood*
- *Food Poisoning*
- *Mosquito Borne Dieases*
- *Land Slide*
- *Matrabhasha Hindi Shikshan*
- *Best of All (Children's Literature Series)*
- *Lazy Juju (Children's Literature Series)*
- *Catch Me If You Can.. (Children's Literature Series)*
- *Ducky Little (Children's Literature Series)*
- *The Baby Bulbuls (Children's Literature Series)*
- *Knock Knock (Children's Literature Series)*
- *Earthquake*
- *Project Book Environmental Education, Class VI*
- *Project Book Environmental Education, Class VII*
- *Project Book Environmental Education, Class VIII*
- *Project Book Environmental Education, Class IX*
- *Prachin Bhartiya Ganit ki Etihask v Sanskritik Jhalakiyan*
- *Kamzor Drishtiwale Bachchen Prathamik Vidyalayon ke Adhyapakon ke liye ek Sandarshika*
- *NISHTHA, Leadership Package*
- *Madhykaleen Bhartiya Ganit ki Etihask v Sanskritik Jhalakiyan*
- *NISHTHA, School Pramukhon aur Shikshako ki Samagr Unnati ke liye Rashtriya Pehal*
- *May be It Is (Children's Literature Series)*
- *The Three Rabbits (Children's Literature Series)*
- *Living Thoughts of Jawarlal Nehru*
- *What on Earth is Energy?*
- *Glimpses of Plant Life Part – II*
- *Nehru, An Anthology for Young Readers*
- *NISHTHA, training Package*
- *Let us Read and Understand*
- *Bhartiya Bhashaon ka Shikshan Rashtriya Focus Samuh ka Aadhar part (1.3)*
- *Ganit Shikshan Shikshan Rashtriya Focus Samuh ka Aadhar part (1.2)*
- *Kasturba Gandhi Balika Vidyalay Setu Pathyakram, Uchch Prathamik Kakshaon mein dakhilen, Hindi*
- *KGBV, Bridge Course for Girls, Entering Upper Primary Stage (English)*
- *Vishesh Aavshyakta vale Bachchon ka Samaveshan Uchch Prathamik Istar*
- *Uchchatar Madhyamik Jeev Vigyan Prayogshala Kit Pustika, Kaksha XI aur XII*
- *Majedar Hain Ganit, Kaksha I aur II*
- *Bhasha Shikshan Hindi Bhag – 2, Dwivarshiya B.Ed. Pathyakram ke liye Pathya Pustak*

TEXTBOOKS FOR OPTIONAL SUBJECT

- *Prayogshala Pustika, Vigyan, Kaksha IX*
- *Prayogshala Pustika, Madhyamik Istar, Ganit*
- *Prayogshala Pustika, Rasayan, Kaksha XI*



- *Prayogshala Pustika, Vigyan, Kaksha X*
- *Prayogshala Pustika, Ganit, Uchhtar Madhyamik Istar*
- *Prayogshala Pustika, Ganit, Prarambhik Istar Kaksha 1, VIII*
- *Prayogshala Pustika, Rasayan, Kaksha XII*
- *Prayogshala Pustika, Bhoutiki, Kaksha XII*
- *Prayogshala Pustika, Ganit, Madhyamik Istar*
- *Mathematics : Exemplar Problems, Class IX*
- *Mathematics : Exemplar Problems, Class XI*
- *Science : Exemplar Problems, Class VII*
- *Science : Exemplar Problems, Class VI*
- *Mathematics : Exemplar Problems, Class VII*
- *Biology : Exemplar Problems, Class XII*
- *Mathematics : Exemplar Problems, Class X*
- *Physics : Exemplar Problems, Class XI*
- *Science : Exemplar Problems, Class IX*
- *Chemistry : Exemplar Problems, Class XII*
- *Biology : Exemplar Problems, Class XI*
- *Mathematics : Exemplar Problems, Class XII*
- *Physics : Exemplar Problems, Class XII*
- *Mathematics : Exemplar Problems, Class VI*
- *Science : Exemplar Problems, Class VIII*
- *Physics : Exemplar Problems, Class XI*
- *Chemistry : Exemplar Problems, Class XI*
- *Mathematics : Exemplar Problems, Class VIII*
- *Ganit Prshn Pradarshika, Kaksha VI*
- *Ganit Prshn Pradarshika, Kaksha X*
- *Rasayan Prshn Pradarshika, Kaksha XI*
- *Vigyan Prshn Pradarshika, Kaksha X*
- *Ganit Prshn Pradarshika, Kaksha IX*
- *Rasayan Prshn Pradarshika, Kaksha XII*
- *Ganit Prshn Pradarshika, Kaksha VI*
- *Laboratory Manual Science, Class IX*
- *Laboratory Manual Science, Classes VI – VIII*
- *Laboratory Manual Mathematics, Secondary Stage*
- *Laboratory Manual Biology, Class XI*
- *Laboratory Manual Chemistry, Class XI*
- *Laboratory Manual Mathematics, Elementary Stage*
- *Laboratory Manual Chemistry, Class XII*
- *Laboratory Manual Biology, Class XII*
- *Laboratory Manual Physics, Class XII*
- *Laboratory Manual Physics, Class XI*
- *Laboratory Manual Chemistry, Class XI*
- *Laboratory Manual Physics, Class XII*
- *Laboratory Manual Chemistry, Class XII*
- *Mathematics : Exemplar Problems, Class VII*
- *Laboratory Manual Science , Classes VI – VIII*



- *Prayogshala Pustika Rasayan, Kaksha XI*
- *Prayogshala Pustika Bhoutiki, Kaksha XI*
- *Laboratory Manual, Biology, Class XI*
- *Prayogshala Pustika, Vigyan, Uchch Prathmik Istar, Kaksha VI – VIII*
- *Prayogshala Pustika, Bhoutiki, Kaksha XII*

TEACHERS' GUIDE

- *Handbook on Understanding Science Through Activities, Games, Toys and Art Forms*
- *Constructivist Approaches to Teachers and Learning (Handbook)*
- *Teacher's Handbook on Environmental Education for the Higher Secondary Stage*
- *Ganit Adhigam Kit Adhyapak Sandarshika Kaksha 1 aur 2*
- *Mathematics Teachers Resource Book, Classes I and II*
- *Including Children with Autism in Primary Classroom 'A Teachers's Handbook'*
- *Health and Physical Education 'A Teacher's Guide for Class VIII*

SUPPLEMENTARY READER

- *Hamara Gujarat*
- *Khoje Huye Prashn*
- *Solar System for Energy*
- *Hamari Kahani*
- *Dashrath Manjhi Pahar se Uncha Aadmi*
- *The Majic of Innocence*
- *Nanha Rajkumar*
- *Nai-Nai Kahaniyan*
- *Chalon Sarkas Chalen*
- *Ghar ki Khoj*
- *How it Happened*

- *Hamara Bhartvarsh*
- *Anne Besent*
- *Azadi ki Ladai ka Sapna*
- *Sagartal par Ek Khan Bahudhatvik Pindon ki*
- *Ramprasad Bismil ki Katha*
- *Kamal ka Hain Mannu*
- *Manouti*
- *Subhas Chandra Bose, A Biography*
- *Bahurupi Gandhi (Hindi)*
- *Balu Bole Apni Baat*
- *Or India*
- *Ghadiyon ki Hadtal*
- *Pyare Nyare Bole*
- *Mera Ghar*
- *Hamari Koun Madad Karega*
- *Kouwe ka Bachcha*
- *Charls Darvin ki Atamkatha*
- *Bahuroop Gandhi*
- *Tensing Norge*
- *Sarojini Naidu*
- *Gandhiji ke Ashram Mein*
- *Uranv Lokgeet evam Lok Kathayen*
- *Dr. Bhim Rao Ambedkar his Life and Work*
- *Sawan Ka Mela*
- *Bharat Mein Chini Yatri*
- *Contors of Courage*
- *Hamara Adbhut Vayumandal ab Maila Kyon ?*
- *Vasco-di-Gama*
- *Bhari Koun Kyon?*
- *Swatantrata Senani Birsa Munda*
- *The Indian Army, A Glorious Heritage*

BARKHA SERIES (HINDI)

- *Rani Bhi*
- *Mun Mun Aur Munnu*
- *Tota*



- Mithai
- Gilli Danda
- Chhupan Chhupai
- Maza Aa Gaya
- Mili ka Gubbara
- Meethe Meethe Gulgule
- Phuli Roti
- Oon ka Gola
- Hich Hich Hichki
- Moni
- Chimti ka Phool
- Jeet ki Pipni
- Out
- Hamari Patang
- Sharbat
- Pattal
- Chawal
- Mausi ke Moze
- Mere Jaisi
- Koodti Juraben
- Talab ke Maze
- Babli ka Baja
- Jhoola
- Mili ke Baal
- Tosia ka Sapna
- Chai
- Gol Gappe
- Peeloo ki Gulli
- Nani ka Chashma
- Chunni Aur Munni
- Mini ke Liye Kya Loon?
- Chalo Pipni Banaein
- Tabla
- Mily ki cycle
- Paka Aam
- Gehoon
- Bhutta

- Gulli Dand: ch
- Gopnagopnam
- Harsh: Jat:
- Milya: Vayulunam
- Madhurani Gulgulani
- Fullita Rotika
- Uransya Golkam
- Hik-Hik Hikka
- Moni
- Keshansadshikaya: Pushpam
- Jeetsay Pipnika
- Nirgat:
- Asmak Patingka
- Prapankam
- Patrlam
- Oadnam
- Matrswasu: Padavarkam
- Maadrshi
- Kudramaane Padavarke
- Sarovartate Aamod:
- Bablya: Vadayam
- Dola
- Milya: keshaa:
- Tosiyaya: Swapan:
- Chayam
- Gulgappakam
- Pilva: Gulli
- Matamahya: Upnetram
- Chunni Munni ch
- Mimya: Krite ki Nayani ?
- Pipnika Rachyem
- Tabal:
- Milya: Dwichakrika
- Pakvam
- Godhuma:
- Bhuttakam

BARKHA SERIES (SANSKRIT)

- Rani Api
- Munmun: Munnu: ch
- Shuk:
- Mishtannam

VOCATIONAL EDUCATION BOOKS

- Animal Health Worker (Job Role),
Class X
- Sales Associate (Job Role),
Class XI



- *Employability Skills (Job Role), Class XI*
- *Sewing Machine Operator (Job Role), Class IX*
- *Automotive Service Technician (Job Role), Class IX*
- *Micro Irrigation Technician (Job Role), Class XI*
- *Gardner (Job Role), Class XI*
- *Employability Skills (Job Role), Class IX*
- *Cable Jointer Electrical Power System (Job Role), Class XI*
- *Distribution Lineman (Job Role), Class XI*
- *Assistant Beauty Therapist (Job Role) Class IX*
- *Unarmed Security Guard (Job Role) Class IX*
- *Store Operations Assistant (Job Role) class IX*
- *Solanaceous Crop Cultivator (Job Role) Class IX*
- *Consumer Energy Technician (Job Role) Class IX*
- *Domestic Data Entry Operator (Job Role) Class IX*
- *Plumber (General) – II (Job Role) Class XI*
- *Beauty Therapist (Job Role) Class – XI*
- *Domestic Data Entry Operator (Job Role) Class IX*
- *Installation Technician Computing and Peripherals, Class XI*
- *State Level Science, Mathematics and Environment Exhibitions for Children 2019–20 and 47th JNSMEE for Children (Bilingual) Guidelines*
- *Exhibits 2019, 46th JNNSMEE for Children Raipur, Chattisgarh*
- *Kala Utsav : 2019 Disha Nirdesh*
- *NCERT Annual Accounts 2018–19*
- *NCERT Varshik Lekha 2018–19*
- *Alpsankhykon ki Shiksha Nitiyan, Karyakram aur yojanayen Barambar Puchey jane wale Prshn*
- *Minority Education Policies Programmes Schemes Frequently Asked Questions*

JOURNALS

- *Journal of Indian Education, February 2018*
- *Journal of Indian Education, No. 1, May 2018*
- *Journal of Indian Education, No. 2, August 2018*
- *Journal of Indian Education, No. 3, November 2018*
- *Journal of Indian Education, No. 4, February 2019*
- *Bhartiya Adhunik Shiksha, Ank 1, July 2018*
- *Bhartiya Adhunik Shiksha, Ank 4, April 2019*
- *Prathmik Shikshak, Ank 1, January 2019*
- *The Primary Teacher, Ank 2, April 2016*
- *School Science No. 1, March 2015*
- *Firki Bachchon ki, Ank -1, June 2019*
- *Firki Bachchon ki Ank – 2, December 2019*

UN-PRICED PUBLICATION

- *NCERT Annual Report 2018–19*
- *NCERT Varshik Report 2018–19*
- *Checklist, NCERT General Publications*
- *Checklist, NCERT Textbook Publications*



Publication Division and its Regional Production-cum-Distribution Centres

S.No.	Name of the Centre	Regions Covered
1.	Publication Division Sri Aurobindo Marg New Delhi 110016 Phone: 011- 26562708 Fax : 011- 26851070 email :cbm.ncert@nic.in	Foreign Countries, Delhi, Parts of the NCERT Campus of Rajasthan, Jammu and Kashmir, Uttarakhand, 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 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)

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)

Professors

- (i) Pawan Sudhir (*Head*)
- (ii) Jyotsna Tiwari

Assistant Professor

- (iii) Sarvari Banerjee

DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

Professors

- (i) Suniti Sanwal (*Head*)
- (ii) Usha Sharma
- (iii) Sandhya Sangai
- (iv) Virender Pratap Singh
- (v) Padma Yadav
- (vi) Kavita Sharma
- (vii) Vardha Mohan Nikalje

Associate Professors

- (viii) Ramesh Kumar
- (ix) Romila Soni

Assistant Professors

- (x) Reetu Chandra
- (xi) Sarla Kumari Verma

Headmistress

- (xii) Jyoti Kant Prasad

Nursery Teacher

- (xiii) Sunayana Mittal
- (xiv) Poonam

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)

Professor

- (i) S.C. Chauhan (*Head*)
- (ii) Anita Julka
- (iii) Vinay Kumar Singh



Associate Professor

- (iv) Bharti

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATION OF EDUCATION (DEPFE)**Professors**

- (i) A.K. Srivastava (Head and Dean Research)
- (ii) Parbhat Kumar Mishra

Assistant Professors

- (iii) Shradha Dilip Dhiwal
- (iv) Sushmita Chakraborty
- (v) Ruchi Shukla
- (vi) Deepmala

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS (DESM)**Professors**

- (i) Sunita Farkya (Head)
- (ii) Dinesh Kumar
- (iii) R.K. Parashar
- (iv) Alka Mehrotra
- (v) Anjani Kaul
- (vi) Rachna Garg
- (vii) Ruchi Verma
- (viii) Til Prasad Sarma

Associate Professors

- (ix) Gagan Gupta
- (x) Chochang V. Shimray
- (xi) Pramila Tanwar
- (xii) Pushplata Verma

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCE (DESS)**Professors**

- (i) Gauri Srivastava (Head)
- (ii) Saroj Bala Yadav
- (iii) Neerja Rashmi
- (iv) Shipra Vaidya
- (v) Pratiyush Kumar Mandal
- (vi) Aparna Pandey
- (vii) Shankar Sharan



- (viii) Seema Shukla Ojha
- (ix) Mohd. Siraj Anwar
- (x) Jaya Singh
- (xi) M.V. Srinivasan
- (xii) Tannu Malik

Associate Professors

- (xiii) Pratima Kumari
- (xiv) Bijaya Kumar Malik

Assistant Professors

- (xv) Harish Kumar Meena

DEPARTMENT OF EDUCATION IN LANGUAGE (DEL)

Professors

- (i) Sandhya Singh (Head)
- (ii) Lalchand Ram
- (iii) Sanjay Kumar Suman
- (iv) K.C. Tripathi
- (v) Jatindra Mohan Mishra
- (vi) Promod Kumar Dubey
- (vii) Diwan Hannan Khan
- (viii) Mohd. Faruq Ansari
- (ix) Mohd. Moazzamuddin
- (x) Sandhya Rani Sahoo
- (xi) Kirti Kapur
- (xii) R. Meghanathan

Associate Professors

- (xiii) Chaman Ara Khan
- (xiv) Naresh Kohli
- (xv) Meenakshi Khar

Assistant Professor

- (xvi) Neelkanth Kumar

DEPARTMENT OF GENDER STUDIES (DGS)

Professors

- (i) Mona Yadav (Head)
- (ii) Poonam Agarwal
- (iii) Mily Roy Anand



DEPARTMENT OF TEACHER EDUCATION (DTE)**Professors**

- (i) Ranjana Arora (Head) (in addition to her duty in DCS and CG)
- (ii) Rajrani
- (iii) Braham Prakash Bhardwaj
- (iv) Kiran Walia
- (v) Madhulika S. Patel
- (vi) Sharad Sinha

Assistant Professors

- (vii) Vijayan K.
- (viii) Jitender Kumar Patidar

DEPARTMENT OF CURRICULUM STUDIES (DCS)**Professor**

- (i) Anita Nuna (Head)

Associate Professor

- (ii) Sharad Kumar Pandey

Assistant Professor

- (iii) K.V. Sridevi

PUBLICATION DIVISION**Professor**

- (i) Anup Kumar Rajput (Head)

LIBRARY AND DOCUMENTATION DIVISION (LDD)**Deputy Librarian**

- (i) Moortimatti Samantaray

Assistant Librarian

- (ii) Pooja Jain

INTERNATIONAL RELATIONS DIVISION (IRD)**Professor**

- (i) Anupam Ahuja (Head)

PLANNING AND MONITORING DIVISION (PMD)**Professor**

- (i) Sridhar Srivastava (Head)



Associate Professors

- (ii) Ashita Raveendran
- (iii) P.D. Subhash

DIVISION OF EDUCATIONAL RESEARCH (DER)

Professors

- (i) Anjum Sibia (*Head*)
- (ii) N.K. Gupta

EDUCATION SURVEY DIVISION (ESD)

Professors

- (i) Indrani Bhaduri (*Head*)
- (ii) Veerpal Singh

Associate Professor

- (iii) Sukhwinder

Assistant Professors

- (iv) Satya Bhushan
- (v) Gulfam
- (vi) Vishal D. Pajankar

ERC (EXAMINATION REFORM CELL) IN ESD

Professor

- (i) A.D. Tewari (*In-charge*)

DIVISION OF EDUCATIONAL KIT (DEK)

Professors

- (i) Vijay Pal Singh (*Head*)
- (ii) A.K. Wazalwar
- (iii) Shashi Prabha

Assistant Professors

- (iv) Ashish Kumar Srivastava

CURRICULUM GROUP (CG)

Professor

- (i) Ranjana Arora (*In-charge*)

Associate Professor

- (ii) R.R. Koireng

B. CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)

- (i) A.P. Behera (*Joint Director, CIET*)



Professors

- (ii) Rajendra Pal
- (iii) Indu Kumar

Associate Professors

- (iv) Rajesh Kumar Nimesh
- (v) Ranjan Biswas

Assistant Professors

- (vi) Angel Rathnabai
- (vii) Mohd. Mamur Ali Lien from services 03.02.2020
- (viii) Abhay Kumar
- (ix) Rejaul Karim Barbhuiya

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

- (i) Rajesh P. Khambayat (Joint Director)

Professors

- (ii) Mridula Saxena
- (iii) R.K. Shukla
- (iv) Rajiv Kumar Pathak
- (v) V.S. Mehrotra
- (vi) Saurabh Prakash
- (vii) Abhijit Nayak
- (viii) Pinki Khanna
- (ix) A. Palanivel (on deputation)

Associate Professors

- (x) Vipin Kumar Jain
- (xi) Kuldeep Singh
- (xii) Deepak Shudhalwar
- (xiii) P. Veeraiah

Assistant Professors

- (xiv) Uadal Singh

D. REGIONAL INSTITUTE OF EDUCATION**RIE, AJMER****Professors**

- (i) S.V. Sharma , Principal
- (ii) J.P. Bagchi
- (iii) K.B. Rath
- (iv) Rajesh Mishra



- (v) Saryug Yadav
- (vi) Nagendra Singh
- (vii) P.K. Chaurasia
- (viii) Kondru Chandra Sekhar

Associate Professors

- (ix) Ayushman Goswami
- (x) Albert Horo
- (xi) Ram Babu Parik
- (xii) Ram Niwas

Assistant Professors

- (xiii) Meenakshi Meena
- (xiv) Muzammil Hasan
- (xv) J.P. Narayan
- (xvi) Anand Kumar Arya
- (xvii) Anil Kumar Nainawat
- (xviii) Rana Pratap
- (xix) Ved Prakash Arya
- (xx) A.K. Gupta
- (xxi) R.K. Sharma
- (xxii) O.P. Meena
- (xxiii) Patanjali Sharma
- (xxiv) Rajiv Ranjan
- (xxv) B.K. Jha
- (xxvi) Ranjana Nagar
- (xxvii) Sneh Sudha
- (xxviii) Amit Ranjan

RIE, BHOPAL

Professors

- (i) Nityanand Pradhan (Principal)
- (ii) V.K. Kakaria
- (iii) B. Ramesh Babu
- (iv) I.B. Chughtai
- (v) Jaydip Mandal
- (vi) Nidhi Tiwari
- (vii) Ratanmala Arya
- (viii) Lallan Kumar Tiwary
- (ix) P.K. Kulshreshtha

Associate Professors

- (x) Sarika C. Saju
- (xi) Sudhakar Wadkar



- (xii) Chitra Singh
- (xiii) Rashmi Sighai
- (xiv) Sanjay Kumar Pandagale

Assistant Professors

- (xv) Sangeeta Pethia
- (xvi) N.C. Ojha
- (xvii) Rizvanual Haque
- (xviii) S. Kalidas Makwana
- (xix) Ram Prakash Prajapati
- (xx) A.K. Garg
- (xxi) Daksha Parmar
- (xxii) Rashmi Sharma
- (xxiii) Kalpana Maski
- (xxiv) Aji Tomas
- (xxv) Shivalika Sarkar
- (xxvi) Lokendra Singh Chauhan
- (xxvii) Saurabh Kumar
- (xxviii) Soyhunlo Sebu
- (xxix) P.K. Tripathy, Librarian
- (xxx) Shruti Tripathi
- (xxxi) Vanthapui Khobang
- (xxxii) Arunrabh Saurabh
- (xxxiii) Ganga Mehto

RIE, BHUBANESWAR

Professors

- (i) P.C. Agarwal (Principal)
- (ii) M.K. Satapathy
- (iii) Anup Kumar
- (iv) B.K. Parida
- (v) Mansi Goswami
- (vi) A.K. Mohapatra
- (vii) P.C. Acharya
- (viii) Ritanjali Das
- (ix) B.N. Panda
- (x) Madhuri Mohapatra
- (xi) S.K. Das
- (xii) A. Ramulu
- (xiii) Dhanalaxmi Das
- (xiv) S.P. Mishra
- (xv) I.P. Gowramma



Associate Professors

- (xvi) Laxmidhar Behra
- (xvii) Ramakant Mohalik
- (xviii) Kumar Parag
- (xix) N. Chhotray
- (xx) Kumar Parag

Assistant Professors

- (xxi) Dhaniya Krishnan
- (xxii) Debarata Baghui
- (xxiii) Elizabeth Gangmai
- (xxiv) Rasmirekha Sethy
- (xxv) Saurabh Kapoor
- (xxvi) Arup Kumar Saha
- (xxvii) Kalinga Ketaki
- (xxviii) Sampa Das
- (xxix) P.L. Negi, Librarian

RIE, MYSURU

Professors

- (i) Y. Sreekanth (Principal)
- (ii) S. Ramaa
- (iii) C.G.V. Murthy
- (iv) G.V. Gopal
- (v) D.G. Rao
- (vi) P. Manjula Rao
- (vii) A. Sukumar
- (viii) Geeta G. Nair
- (ix) M.U. Paily
- (x) Malli Gandhi
- (xi) C. Padmaja
- (xii) Anil Kumar K.
- (xiii) Kalpana Venugopal
- (xiv) V.S. Prasad
- (xv) Ram Das V.

Associate Professors

- (xvi) R. Ravi Chandrana
- (xvii) M.S. Srimathi (CAS)
- (xviii) P. Tamilselven
- (xix) P.R. Harinath
- (xx) V. Prasad



Assistant Professors

- (xxi) T.V. Soma Sekher
- (xxii) Sujata B. Hachinkar
- (xxiii) V. Chandranan
- (xxiv) V. Rani Promila
- (xxv) K.B. Shaji
- (xxvi) S. Chinnappanavar
- (xxvii) Raman Namboodiri C.K.
- (xxviii) Santosh Kumar
- (xxix) V. Tangpu
- (xxx) V.S. Prasad
- (xxxi) Madhu B.
- (xxxii) Sarvash Morya
- (xxxiii) Suresh Kumar K.
- (xxxiv) S. Nagaraja (Librarian)

NERIE, UMIAM (MEGHALAYA)**Professors**

- (i) Bidyadhar Barthakur (Principal)
- (ii) Subhash Chandra Roy
- (iii) B.R. Dkhar

Associate Professors

- (iv) Ph. Brajayanti Devi
- (v) F.G. Dkhar
- (vi) Shatrupa Palit

Assistant Professors

- (vii) Tulika Dey
- (viii) Seema Saigal
- (ix) Prachi Ghildyal
- (x) Melissa Gracil Wallang
- (xi) Tasongwi Newmei
- (xii) Chanambam Sarajubala Devi
- (xiii) Basansy Kharlukhi
- (xiv) Arneb Sen
- (xv) Anand Valmiki
- (xvi) B. Umesh Kumar Sharma
- (xvii) Ram Avdesh Singh
- (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