

NCERT Annual Report 2020–2021



N C E R T

Annual Report 2020–2021

विद्यया ऽ मृतमश्नुते



एन सी ई आर टी
NCERT

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

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Foreword

The year 2020–21 has been unique and challenging for all of us, a year that shook humanity to the core. The National Council of Educational Research and Training (NCERT), being an institution with diversified experiences, domain expertise and deep understanding of issues at the grass-roots level in school education across the country, rose to the situation and came up with holistic solutions to effectively address the challenges.

The COVID-19 pandemic reinforced the need to look at alternative modes and flexible forms of education. The NCERT took up various initiatives like development of Alternative Academic Calendar; PRAGYATA guidelines on digital education; Students' Learning Enhancement Guidelines, NISHTHA—National Initiative for School Heads' and Teachers' for their Holistic Advancement: Online; PM eVidya, Radio, Community Radio and Podcasts, e-Content for visually and hearing-impaired students; e-textbooks and National Repository of Open Educational Resources (NROER); cyber safety and cyber bullying; MANODARPAN for psychosocial support and counselling services for schoolchildren; 'SAHYOG': Guidance for Mental Well-being of Children, etc., which have helped to mitigate the impact of the pandemic.

In the year under report, as a follow-up to the implementation of the *National Education Policy* (NEP) 2020, the Council initiated the process of the development of National Curriculum Frameworks (NCFs). Further, through its extensive print and digital publishing, capacity-building programmes, online courses and webinars, the Council made attempts to reach out to all stakeholders of school education. The NCERT, apart from taking various initiatives during the COVID-19 period, has also been involved in the development of infographics or posters, test items, worksheets or quiz items and scripts for byte sized video programmes based on the learning outcomes; foundational literacy and numeracy guidelines and revision and codification of learning outcomes, etc.

The researches in NCERT focused on the review of curriculum, syllabi and textbooks, status of girls' hostel scheme, implementing interventions in six rural revenue blocks, inclusive classroom, gender concerns, learning environment, art integrated learning, sustainable development, Augmented Reality, learning outcomes of children with learning disabilities, mother tongue education, etc. From taking up digital initiatives and providing digital resources, to building capacities of teacher-educators and teachers through its webinar series on various ICT tools, and continuous online education support through the 12 PM eVidya DTH TV channels, NCERT has put in extraordinary efforts. In the area of vocational education, the Council published 152 vocational curricula, 40 textbooks and digital resources; developed guidelines for pre-vocational education; conducted orientation programmes and organised national conference and regional and national consultation meetings for the implementation of vocational education in schools.

The unstinted support and guidance received from the Ministry of Education, erstwhile Ministry of Human Resource Development, Government of India, and other collaborators helped us move ahead in our mission. We have been working round-the-clock, delivering to the people.

I appreciate the dedication and hard work of all my colleagues across the country despite the trying circumstances, which has helped us reinforce the country's education system. My sincere appreciation to Ashita Raveendran, *Associate Professor* and *In charge Head*, Planning and Monitoring Division (PMD); and P.D. Subhash, *Associate Professor*, PMD, NCERT; for providing vital contributions in bringing together the Council's achievements and landmarks for the year in this Annual Report.

We realise that to meet the challenges of today's world, we must mobilise and work together. To this end, the Council uses all opportunities for handholding its stakeholders and improving upon day-by-day. As we look forward to important and crucial works on the implementation of NEP 2020, and development of curriculum frameworks in subsequent years, we will build on these results in an effort to create irreversible momentum. We look forward to another exciting and challenging year ahead!

New Delhi
December 2021

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

EE	Elementary Education
ELP	Early Literacy Programme
ERIC	Educational Research and Innovations Committee
ESD	Educational Survey Division
ESMP	Early School Mathematics Programme
ET	Educational Technology
EVS	Environmental Studies
FA	Formative Assessment
FAQ	Frequently Asked Question
FOSS	Free and Open Source Software
FSSAI	Food Safety and Standard Authority of India
GCED	Global Citizenship Education
GCRC	Guidance and Counselling Resource Centre
GoI	Government of India
HEFS	Human Ecology and Family Sciences
HEI	Higher Education Institute
HRD	Human Resource Development
IAB	Institute Advisory Board
IASE	Institute of Advanced Studies in Education
ICDS	Integrated Child Development Scheme
ICT	Information and Communication Technology
IEA	International Association for the Evaluation of Educational Achievement
IIT	Indian Institute of Technology
IJET	Indian Journal of Educational Technology
INDEM	Inter Demonstration School Meet
IRD	International Relations Division
ISLP	Integrated School Language Programme
ISMP	Integrated School Mathematics Programme
IT	Information Technology
ITPD	In-service Teacher Professional Development
JNNSMEE	Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children
JNV	Jawahar Navodaya Vidyalaya
KGBV	Kasturba Gandhi Balika Vidyalaya
KRIVET	Korean Research Institute for 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
MoE	Ministry 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
MPD	Media Production Division
NAS	National Achievement Survey
NBB	National Bal Bhavan
NBT	National Book Trust
NCC	National Cadet Corps
NCERT	National Council of Educational Research and Training
NCF	National Curriculum Framework
NCFTE	National Curriculum Framework for Teacher Education
NCT	National Capital Territory
NCTE	National Council for Teacher Education
NDG	National Development Group
NE	North East
NER	North East Region
NERIE	North East Regional Institute of Education
NESAC	North Eastern Space Application Centre
NGO	Non-Governmental Organisation
NIE	National Institute of Education
NIOS	National Institute of Open Schooling
NITTTR	National Institute of Technical Teachers 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
NSQF	National Skills Qualifications Framework
NTSE	National Talent Search Examination
NTSS	National Talent Search Scheme
NUD	National Unity Day
NUEPA	National University of Educational Planning and Administration
OB	Operation Blackboard
OER	Open Educational Resources
OoSC	Out of School Children
PAB	Project Approval Board
PAC	Programme Advisory Committee

PECR	Primary Education Curriculum Renewal
PGDGC	Post Graduate Diploma in Guidance and Counselling
PGT	Post Graduate Teacher
Ph.D.	Doctor of Philosophy
PINDICS	Performance Indicators
PMD	Planning and Monitoring Division
P-MOST	Programme of Mass Orientation of School Teachers
POA	Programme of Action
PRD	Planning and Research Division
PSAC	Primary School Achievement Certificate
PSSCIVE	Pandit Sunderlal Sharma Central Institute of Vocational Education
PTM	Parents Teacher Meeting
PTR	Pupil Teacher Ratio
R&D	Research and Development
RAA	<i>Rashtriya Avishkar Abhiyan</i>
RCSME	Resource Centre for Science and Mathematics Education
RIE	Regional Institute of Education
RISM	Regional Institutes Students' Meet
RMSA	<i>Rashtriya Madhyamik Shiksha Abhiyan</i>
RTE	Right to Education
SA	Summative Assessment
SAP	School Attachment Programme
SBA	School Based Assessment
SC	Scheduled Caste
SCC	State Coordination Committee
SCERT	State Council of Educational Research and Training
SDGs	Sustainable Development Goals
SHP	School Health Programme
SIE	State Institute of Education
SIET	State Institute of Educational Technology
SLSMEE	State Level Science, Mathematics and Environment Exhibition
SMC	School Management Committee
SMDC	School Management and Development Committee
SOPT	Special Orientation Programme for Primary School Teachers
SPC	Student Police Cadet
SPD	Sensory Processing Disorder
SPMC	Screening-cum-Progress Monitoring Committee
SRG	State Resource Group
SSA	<i>Sarva Shiksha Abhiyan</i>
SSK	Secondary Science Kit
ST	Scheduled Tribe
STC	Special Training Centre
SWAYAM	Study Webs of Active-Learning for Young Aspiring Minds
TGT	Trained Graduate Teacher

TLM	Teaching Learning Material
TNA	Training Needs Analysis
TPCK	Technological Pedagogical Content Knowledge
TVET	Technical and Vocational Education and Training
UGC	University Grants Commission
UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural 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 Educators
WwC	Working with Community

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

— रवीन्द्रनाथ टैगोर



‘The Problem is not how to wipe out the differences but how to unite with the differences intact.’

— Rabindranath Tagore



1. Overview

The National Council of Educational Research and Training (NCERT) was registered as a society under the Registration of Societies Act (Act XXI of 1860) on 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 functioning 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 the NCERT are to:

- ❑ undertake, promote and coordinate research in areas related to school education;
- ❑ prepare and publish model textbooks, supplementary material, newsletters, journals and develop educational kits, multimedia digital materials, etc.;
- ❑ organise pre and in-service training for 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), the 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 Education Centre (1956), and the National Institute of Audio-Visual Education (1959). The amalgamation of these institutions indicated the need to develop a holistic view of education in the country. Over the years, the structure and functions of the NCERT have been modified to cater to the changing educational needs of the country. Now, it flourishes with institutions located in different parts of the country viz., National Institute of Education (NIE) at New Delhi consisting of 19 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 an apex national body, launched a process of rethinking education, national in character, and at the same time, facilitating and encouraging the expression of the varied culture across the country. Generally, the NCERT is synonymous with publication of textbooks. Indeed, the NCERT has produced generations of textbooks for schoolchildren on science, social sciences and languages, latest being the textbooks based on the *National Curriculum Framework 2005*. Yet, true to its name, the NCERT works on the entire gamut of school education, be it conducting research in school education, conducting innovative pre 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 to NPE and PoA, the 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, the NCERT provided inputs in terms of development of the National Curriculum Frameworks followed by the preparation of syllabi, instructional material, 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 Council played a significant role in providing inputs to the *National Education Policy 2020* and has also initiated works for the preparation of a New Curriculum Framework based on NEP 2020.

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 B.Sc. B.Ed., BA. B.Ed., and two-year B.Ed. courses in its Regional Institutes of Education. It also runs a one-year PG 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. The 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) every year, in which 2000 meritorious children are provided scholarships 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 material for both teachers and students in print, as well as, 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/schemes, such as Vocationalisation of Secondary Education, Non-formal Education Programmes for Children in 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, the Council has undertaken significant projects funded by international agencies, which provided 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, Scholastic Aptitude Tests in Hindi for grades VIII and XI, Evaluative Criteria for Inspection and Supervision in Secondary Schools, Wastage and Stagnation in Primary and Middle Schools, Survey of Achievement in Mathematics at three levels of school education, Identification of Talent in Elementary and Secondary Schools, Curriculum and Methods of Teaching Mathematics in Secondary Schools, etc.

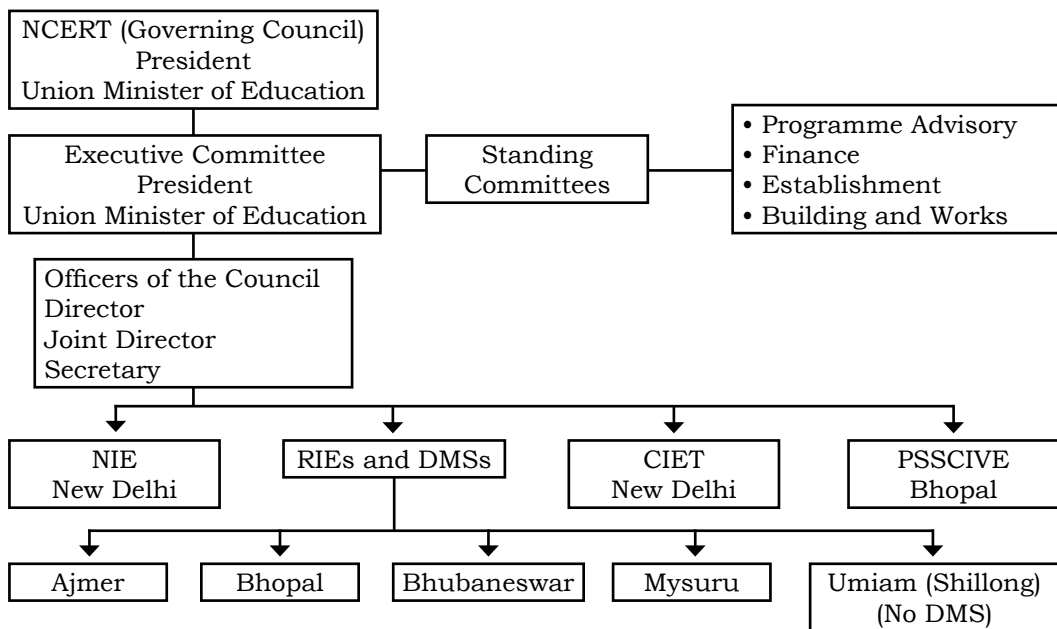
Some other major initiatives of the NCERT in recent years include—the countrywide training programme called National Initiative for School Heads' and Teachers' Holistic Advancement (NISHTHA), digitisation of education through the development of e-Textbooks and QR code e-resource mapping of NCERT textbooks, PM eVidya, which offers multi-modal access to digital/online education for school by integrating DIKSHA (One Nation-One Digital Platform), SWAYAM, MOOCs, IIT-PAL, etc., National Repository of Open Educational Resources, live discussions on different areas of school and teacher education on SWAYAM PRABHA DTH-TV Channel and *YouTube* channel of 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 Qualifications Framework (NSQF) and textbooks for vocational courses, guidelines for Art Integrated Learning at the elementary level of school education, Preschool Curriculum and Guidelines for the Preschool 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), Alternative Academic Calendar across four stages— Primary, Upper Primary, Secondary and Higher Secondary due to COVID-19 pandemic for providing all children school education at home using alternative ways maintaining a joyful learning approach with the participation of their parents under the guidance of teachers, SAHYOG—a live interactive session under MANODARPAN Cell for providing



psychosocial support for mental health and well-being of students during the COVID-19 outbreak, Pragyata Guidelines on Digital Education, extensive use of radio, community radio for the children in remote areas who do not have access to online education, Learning Outcomes (LO) for all the three stages of school education— Elementary, Secondary and Higher Secondary Stage for enhancing the quality of learning in schools by enabling teachers to ascertain learning skills more accurately and taking corrective steps for providing effective learning opportunities to all students including Children with Special Needs, etc.

ORGANISATIONAL STRUCTURE

The general body of the NCERT comprises the Education Ministers of all States and Union Territories (UTs), the Chairperson of the University Grants Commission (UGC), the Secretary to the Government of India, Ministry of Education (MoE), 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 Education is the President (*ex-officio*), and the Secretary, NCERT, is the Convener of the general body of NCERT.



The Executive Committee is the main governing body of 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. The Union Minister of Education is its President (*ex-officio*) and the Union Minister of State in the Ministry of Education is the Vice-President (*ex-officio*). The members of the Executive Committee are Director, NCERT;



Secretary to the Government of India, Ministry of Education); Chairperson of the University Grants Commission; four educationists well known for their interest in school education (two of whom shall be school teachers); the Joint Director, NCERT; three members of the faculty of NCERT (of whom at least two are of the level of Professor and Head of the Department); one representative of the MoE and one representative of the Ministry of Finance (who is the Financial Adviser of NCERT). The Secretary, NCERT is the Convener of the Executive Committee. The Executive Committee is further assisted in its work by the following Committees 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 2020–21, 141st and 142nd Finance Committee meetings were held at NIE, New Delhi on 26 May 2020 and 26 June 2020 respectively. The 107th meeting of the Executive Committee was held on 12 October 2020 at Shastri Bhawan, Ministry of Education, New Delhi. The 57th meeting of the General Council was held at Shastri Bhawan, Ministry of Education, New Delhi, on 22 October 2020.

Senior Functionaries of the NCERT

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

Senior Functionaries of the NCERT (2020–21)	
Director	Sridhar Srivastava (Additional Charge from 15.11.2020 A/N) Hrushikesh Senapaty (Up to 15.11.2020 F/N)
Joint Director	Sridhar Srivastava (From 15.04.2020)
Secretary	Major Harsh Kumar
Joint Director (CIET)	Amarendra Prasad Behera
Joint Director (PSSCIVE)	Rajesh P. Khambayat
Dean (Academic)	Anjum Sibia (From 05.11.2020) Saroj Bala Yadav (Up to 30.09.2020)



Dean (Research)	A.K. Srivastava
Dean (Coordination)	Gouri Srivastava (From 05.11.2020) Anita Julka (02.07.2020 to 04.11.2020) Sridhar Srivastava (Up to 01.07.2020)

PLANNING AND PROCESSING OF PROGRAMMES

The programmes of NCERT are formulated keeping in view the broader perspectives of the *National Policy on Education* (NPE) and the educational needs of the States. The educational needs of the states are identified mainly through the mechanism of the State Coordination 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 a State is the chairperson of the respective SCC and the Principal of the concerned Regional Institute of Education (RIE) is the member-convener. The identified educational needs of the States are first considered by the Institutes Advisory Boards (IABs) of RIEs and then by the Managing Committees (MCs) of RIEs.

The academic programmes of the departments, divisions and 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 examine the academic aspects of the works of the Council to ensure a coordinated approach to the development of the programmes. The PAC reports to the Executive Committee of NCERT regarding the overall directions in which research, training, extension and other programmes would be channelised to best serve the interest of school education in the country.

Conducting and sponsoring educational research is one of the major activities of 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). The ERIC promotes and sponsors research in various areas of school education and teacher education.

Constituent Units of the NCERT

The major constituent units of the NCERT, which are located in different regions of the country are as follows.

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 development activities related to pedagogical aspects of curriculum; prepares prototype curricular and supplementary materials; develops school education related database and undertakes experiments in pre-school, elementary, secondary and higher secondary stages to support the all-round development of children. The NIE conducts short 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 as follows.

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 and environmental education for Classes VI to XII. The department carries out research, development, training, evaluation and extension activities. The department conducts research in innovative methods of teaching-learning and other issues related to science and mathematics education, develops teaching-learning material in print and digital forms, such as syllabi, textbooks, supplementary material, e-Resources, for students, teachers, teacher-educators, Children with Special Needs, etc. The department also develops and disseminates material for popularisation of science, mathematics and environmental education. Capacity building programmes for teachers and teacher-educators in face-to-face mode as well as online mode are conducted regularly. Different extension activities of the department include organisation of seminars, publication of the journal *School Science*, and organising 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. *Rashtriya Avishkar Saptah* (RAS), an annual event, was also organised by the department under *Rashtriya Avishkar Abhiyan* (RAA). The department has also developed a 'Science Park' and a 'Herbal Garden', which provide valuable information and ideas for schools to replicate the same for the benefit of children. The Resource Centre for Science and Mathematics Education (RCSME) of the department is a rich repository, providing both print and electronic resources on science and mathematics education.

The department assists and advises the Ministry of Education, Government of India, in various issues and concerns related to science, mathematics and environment education at the school level. 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 the development of curricular, co-curricular and other support material for students as well as teachers. DESM extends its cooperation to other departments of NCERT in



conducting various capacity building and extension programmes. The faculty at DESM also provides expertise to SCERTs, State Boards of School Education, Central and State governments, universities, etc.

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. Since then, the department has been working in the area of education of Children with Disabilities (CwD) and children belonging to socially disadvantaged groups, such as Scheduled Castes (SCs), Scheduled Tribes (STs) and Minorities. Implementation of an inclusive system of education for all assumes greater significance for systemic reforms especially in the context of the socially disadvantaged and the children with disability. The department hosts a cell, namely the Minority Cell, which was created in NCERT on 28 July 2006 for the promotion of education and welfare of minorities.

The major roles of the department are: to facilitate equitable and inclusive school education to children from socio-economic disadvantaged groups, namely, CwD and children belonging to socially disadvantaged groups of the society through major programmes of the government like the *Samagra Shiksha*; to concentrate on issues and problems related to the education of children from SCs, STs (with a focus on nomadic, identified, primitive, coastal and hill tribes and disturbed tribal areas due to natural disasters and human action) and Minorities (linguistic and religious) and to provide quality education to these disadvantaged groups; to play an advocacy role for increasing the coverage of CwDs under all programmes, schemes and committees and also for the implementation of Right to Education (RTE) Act, 2009, from the perspective of SEDGs children.

The key functions of the department are to conduct research and develop research based teachers' guides, manuals, handbooks and training packages, etc., organise training programmes for teachers, teacher-educators and policy makers focussing on strategies for providing quality education to children belonging to the vulnerable groups; support the development of inclusive curriculum and teaching-learning material based on Universal Design of Learning (UDL), provide resource support to the Centre, States, NGOs and International and National agencies for the implementation of inclusion of CwD and other vulnerable groups in education.

3. DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

The Department of Educational Psychology and Foundations of Education (DEPFE), with a major thrust in 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. The department extends its resources and collaborates in providing psychological perspectives to different aspects of school education, viz., curriculum planning, textbook writing, teacher training, assessment, etc.



4. DEPARTMENT OF TEACHER EDUCATION

The Department of Teacher Education addresses the task of formulation and organisation of pre-service and in-service teacher education programmes. The programmes and activities of the Department of Teacher Education (DTE) focus on research in the area of teacher education; development of material and capacity building of teachers and teacher-educators; academic support to the institutions of teacher education created under centrally sponsored scheme of teacher education and *Samagra Shiksha* 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; perform advisory role in matters concerning teacher education and to provide technical support to the Ministry of Education and State and 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 or renewal of pre-service teacher education programmes at different levels and formulation of models or designs of in-service education, continuing education and lifelong education of the teachers; adopt and assist SCERTs, SIEs, DIETs and BITEs, for developing and strengthening them as professional institutions in the respective States and 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 Teachers, Teacher-educators and Key Resource Persons (KRPs) at different levels utilising emerging Information and Communication Technologies (ICT); undertake policy related research or 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 or professional experience programmes and pedagogy; and to develop material 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, NCTE Regulation, 2014 and NEP 2020.

The year 2020–21 has been engaging for the NCERT and also the DTE in providing important inputs in respect of NEP 2020. The DTE continues to participate, as a part of NCERT, in activities aimed at preparation of curriculum framework for school as well as teacher education.

5. DEPARTMENT OF ELEMENTARY EDUCATION

The Department of Elementary Education (DEE) is a nodal department of NCERT to advise the Government of India (GoI) on policies and programmes pertaining to elementary education. The department has consistently been supporting and providing guidance to States and UTs for the implementation of Right to Education (RTE) Act, 2009, to achieve the goal of quality elementary education for all. The major roles and functions of the department are to develop syllabi, textbooks, resource material for teachers and teacher-educators, assessments,



exemplar materials; organise orientation and training programmes for master trainers and key functionaries on various aspects of curriculum and its transaction; conduct researches in the areas of preschool and elementary education; and organise extension activities to provide academic forum to the States, UTs and other stakeholders in the area of education through seminars, national meets, etc. After the announcement of *National Education Policy 2020*, the department has representation in various groups and committees formed for various themes of NEP 2020 at the foundational stage.

In the present context, the department has contributed in the areas of teaching learning at the foundational stage of NEP 2020, including preschool education (I and II), *Balvatika* for one year and Classes I and II, as well as at the preparatory stage (Classes III, IV and V). Implementation of Foundational Literacy and Numeracy (FLN) Mission, Bridge Course for Out of School Children, Continuous and Comprehensive Evaluation (CCE), Integrated School Language Programme (ISLP), and Integrated School Mathematics Programme (ISMP).

6. DEPARTMENT OF EDUCATION IN LANGUAGES

The Department of Education in Languages, established in 2005, works in the area of language education at all stages of school education. The department keeps abreast of recent developments in language education. Keeping in view the diversity in school education, the department conducts research, development, training and extension programmes for all stages of school education and provides academic inputs to States and UTs based on the innovative principles of language education. The department has contributed in the process of rationalisation of curriculum and syllabi from the perspective of language education and review of textbooks of some States and UTs. The department has been bringing out an online magazine *Bhasha Sangam* for the last four years with a view to promote multilingual and multicultural character of a plural society. This magazine covers all the activities of the department in detail. In order to face the challenges due to COVID-19 Pandemic, the department developed two weeks, four weeks and eight weeks alternative academic calendar based on Learning Outcomes (LOs) for students as well as teachers in four languages viz., Hindi, Urdu, English and Sanskrit. Faculty of the department was involved in various programmes throughout the year, such as SWAYAM PRABHA, audio/video recording, PM eVidya, etc. The department developed a roadmap for activities based on LOs in four languages for all stages. Also, it translated the NISHTHA module into Urdu and Hindi. The DEL faculty has been involved in online NISHTHA training.

7. DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

The Department of Education in Social Sciences undertakes activities related to research, development of material, and training and extension related activities in the domain of social sciences. The researches of the department can be broadly classified into diagnostic and evaluative and can cover different areas related to subject specific themes. In order to provide a wide coverage to the teaching of social sciences, the department completed modules for the online course in Social Sciences for teachers at the secondary stage. Also, modules were finalised for the second and third phase of six months certificate course on 'developing school social science textbooks and other curricular materials'.



In connection with developmental activities, a variety of materials in the form of e-Content, tool kit items, infographics, worksheets, charts, posters and so on, were prepared to encourage teachers to use them in the teaching and learning processes, for concept clarification and to make teaching and learning a joyful and interesting experience. Besides, the department contributed in developing modules on India's Glorious Past, Dynamic Present and Promising Future. Contributions were also made to the Integrated Multi-disciplinary Professional Advancement Course for the teachers of Jammu and Kashmir and Ladakh.

During the pandemic, the department contributed in developing *Alternative Academic Calendar* in all subject areas of Social Sciences from Classes VI to XII. The Learning Outcomes in Higher Secondary Stages were also prepared for all subject areas. The department contributed in developing exemplar learning outcome based formative and summative assessment items for Classes VI to VIII in the domain of Social Science.

The extension activities in 2020–21 emphasised preparing guidelines on essay and quiz competitions marking the contributions of eminent personalities like Mahatma Gandhi, B.R. Ambedkar, Sardar Vallabhbhai Patel and Subhash Chandra Bose. In addition, guidelines and quiz items were prepared for the celebration of the Constitution Day, Kargil Diwas, Yoga Day and Republic Day. The department also developed guidelines, themes and evaluated essays submitted by students from 25 States and UTs on the theme *Atmanirbhar Bharat-Swatantra Bharat*. More recently, guidelines and themes were prepared on the occasion of the 75th anniversary of Independence, as part of which *Azadi ka Amrit Mahotsav* is being held for encouraging creative participation of students. The department also prepared a speech on the occasion of the 400th birth anniversary celebrations of Guru Tegh Bahadur.

8. DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

The Department of Education in Arts and Aesthetics (DEAA) was created as a separate department on 24 November 2005, at NIE, New Delhi, with the concept "to promote all forms of arts in schools by bringing it into the mainstream of country's education system through various activities as development, training, research, orientation and 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 material, supplementary material including monographs, anthology, audio-visual material, multimedia programmes, process documents, etc., for all stages of school education in visual arts, theatre, music and dance; conduct capacity building programmes for in-service teachers, teacher-educators of different levels and stages in art education; review and develop the curriculum and syllabus periodically; integrate art education across the entire school curriculum to provide children with joyful and experiential learning in all subjects; evolve and conduct pre-service teacher education courses in arts education; and develop a strong network with various national, international, regional, government and non-government organisations, which are 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, was upgraded to a full-fledged Department of Women's Studies in 1989 to address the issue of girls' education and women empowerment more intensively. The department was renamed as the Department of Gender Studies in the light of a landmark judgment of the Supreme of Court of India in 2014, for treating transgenders as the '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; revise curricular material and textbooks from the viewpoint of gender bias and stereotyping; develop gender inclusive modules and exemplar material for teacher-educators and teachers; work towards bringing positive societal change in favour of girl child and transgenders 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; train teacher-educators and provide inputs to pre-services 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.

The Department recently prepared a working paper on "Education for Gender Equality and Empowerment" and contributed in the preparation of the working paper on "Emerging Role of Community in School Education". The department also made important contributions during the pandemic by contributing in the Preparation of Alternative Curriculum for History (Classes IX and X), Preparation of Guidelines for Reopening of Schools, Preparation of Guidelines for Recruiting Volunteers, Customisation of the module on Gender for NISHTHA Elementary for DIKSHA platform, Gender Equality module for Health and Wellness programme under *Ayushman Bharat*, Evaluation of textbooks in History, development and review of Learning Outcomes for Human Ecology and Family Sciences (HEFS) and providing gender related inputs for various online capacity-building programmes for various stakeholders of education.

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 priority areas of school and teacher education. The ERIC members include eminent researchers in education and allied disciplines from universities and research institutions and representatives of SIEs and SCERTs. The division also awards NCERT Doctoral Fellowships to students working for their doctoral degrees in a



university or research institution. Another new scheme 'NCERT Research Associateship (Educationists'/Researchers' Pool)' provides opportunities to young educationists or educational researchers, who have done their Ph.D. on topics relating to school education but have still not got regular jobs, a chance to contribute and gain experience in their relevant areas pertaining to school education. NCERT, in particular, and the education system in India as a whole, will also gain from the energy, enthusiasm and knowledge of these young researchers.

11. EDUCATIONAL SURVEY DIVISION

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

The functions of the Educational Survey Division are operationalisation of Examination Reforms System at national level in collaboration with different State boards; ensuring capacity building of State level functionaries in developing and implementing school-based assessment protocol for foundational learning, preparatory stage, middle stage and secondary stage; providing central facility for statistical analysis of data pertaining to large-scale surveys, studies and projects conducted by different constituents of the NCERT; building capacity of state resource persons in conducting large-scale educational surveys; developing conceptual material in learning assessment for the use of teacher-educators, in-service teachers, pre-service teachers and resource persons; undertaking research in areas pertaining to learning assessment; and conducting National Talent Search Examination (NTSE) as a special testing programme to identify talent.

12. DIVISION OF EDUCATIONAL KITS (DEK)

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 role and functions of the Division are to study the teaching-learning equipment in science and mathematics and to design, develop and make experimental trials in schools for testing the designs and production.

The Division is responsible for augmenting improvement in teaching-learning in the field of school education supporting print media through hands-on experience by design, development and prototype production of school equipment in the form of educational kits. The division also provides hands-on-training to students, teachers and teacher-educators on the use of various kits developed by it. The Division conducts various extension activities viz., hands-on activities in science, mathematics and technology to ensure children participation in the annual Jawaharlal Nehru National Science, Mathematics and Environment Exhibition for Children, World Book Fair World Trade Fair, and Global Education Summits.



Recognising that constructive hands-on experience holds key to conceptual understanding, 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 research and development activities that lead to enabling the child to explore the concepts and draw meaningful conclusions through thematic Kits. The DEK acts as a model division for prototype kit design and development, a path-setter in the shifting paradigm of educational practices and imparting hands-on training to teachers, students and teacher-educators on the use of educational kits. It is 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 the programmes to the MoE. It acts as a clearing house with 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 NCERT in formulating short- and long-term academic programmes and evaluating its implementation and assessing progress, PMD has been engaged in the following activities.

- ❑ Preparation of Annual Report of NCERT;
- ❑ Preparation of NCERT component for the Annual Report of MoE;
- ❑ Preparation, development and updating of general guidelines for formulation of academic programmes;
- ❑ Preparation of time schedule and participation in the meeting of programme processing committees: Departmental Advisory Boards, Academic Committee, Institute Advisory Boards and Management Committees; Convening Programme Advisory Committee meetings;



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



58th PAC meeting of the NCERT



- ❑ Quarterly monitoring of the progress of programme implementation undertaken by the Institutes or Departments or Divisions or Cells; collection and processing of information through follow up actions; preparation of report on Human Rights recommendations for MoE; preparation of Annual Programme Budget of NCERT; processing 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 the NCERT with the MoE; review of programme proposals for NIE Departments or Divisions or Cells, CIET, PSSCIVE and RIEs for duplication and financial aspects as per recommendations of meetings of the PAC; and
- ❑ Coordination of projects approved by the Project Approval Board (PAB) of the Ministry of Education under the *Samagra Shiksha* Integrated Scheme.

14. INTERNATIONAL RELATIONS DIVISION

The International Relations Division (IRD) carries out various activities in conformity with the NCERT's role to promote international cooperation, to facilitate exchange of information between NCERT and agencies and institutions abroad, signing of MoUs between NCERT and willing agencies and institutions abroad and discharge responsibility as the Academic Secretariat of the National Development Group (NDG). As part of these activities, IRD hosts visiting delegations from abroad and facilitates cooperation in the areas of formulation of national education policies, development of national curriculum frameworks, organisation of pre and in-service teacher education programmes, formulation and implementation of programmes for vocational education, educational technology and facilitates the participation of faculty from the NCERT in international seminars, conferences, meetings, exhibitions and training programmes under the auspices of international organisations like UNESCO, UNICEF, UNDP, etc. With similar objectives, IRD has also worked out a 'Vision Document' through which it would be possible to increase the Council's international footprints.

Based on the experiences of such activities, IRD at present is actively engaged in the process of working out and signing MoUs in different areas of school education with some noted institutions and agencies of countries, including Taiwan, Sri Lanka, Nepal, Bhutan and Finland. The IRD has so far signed MoUs with the Academy of Korean Studies (AKS), the Republic of Korea, the Mauritius Institute of Education (MIE), Mauritius, Curtin University (CU), Australia, and Florida State University (FSU) and University of St. Francis, USA. The objectives behind the signing of these MoUs are to foster structured and meaningful relations with these countries for mutual benefit and to improve the quality of school education. During the pandemic, the division worked through the virtual mode for carrying out various activities as defined in the MoUs. Bilateral cooperation in education with the Islamic Republic of Iran and Vietnam were also initiated during the period.

15. DEPARTMENT OF CURRICULUM STUDIES

The Department of Curriculum Studies (DCS) has been working with the objective of looking after various aspects of curriculum research and



development. Besides generating knowledge base on curriculum practices and textbooks, the department is also working on building capacities of agencies in States and UTs serving in school education on curriculum research and development. The department undertakes various activities, such as capacity building of teachers and teacher-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 mechanisms employed in the process of curriculum design and development.

16. CURRICULUM GROUP

Curriculum Group was set up with effect from 18 September 2019 to look after various aspects of curriculum, coordinate curriculum development related tasks and prepare National Curriculum Frameworks in consonance with perspectives of the National Education Policies. The department is engaged in generating knowledge base on curriculum practices and other teaching-learning material; building capacities of agencies in States and UTs serving in school education on curriculum research and development; developing and disseminating curriculum documents to provide academic support to stakeholders on curriculum issues; evolving strategies in the process of curriculum development; conducting researches in curriculum development and mechanisms employed in the process of curriculum development.

17. HINDI CELL

With the enforcement of the Constitution on 26 January 1950, Hindi became the Official Language of the Union of India, according to Article 343 of the Constitution. The Government of India was entrusted with the responsibility of promotion of the status of Hindi. Consequent upon the enactment of the Official Language Act, 1963, Ministry of Home Affairs, the 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 was enacted. Keeping in view the promotion and proper implementation of the official language Hindi in day-to-day functioning of the Council, the Hindi Cell was constituted at the Council's Headquarters in New Delhi.

To implement these rules, the 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 the administrative working of the Council. To promote and ensure the proper implementation and discuss the progress in the Council, the Hindi Cell organised four meetings of the Official Language Implementation Committee, one in each quarter, i.e. on 10 July 2020, 29 October 2020, 18 December 2020 and 26 March 2021. The Quarterly Progress Reports based on the inputs received from the Departments or Divisions or Cells or Sections and Units of NIE, New Delhi, were also submitted to the Ministry of Education and the Department of Official Language, Ministry of Home Affairs, Government of India.



18. PUBLICATION DIVISION

The NCERT publishes school textbooks, workbooks, supplementary readers, teachers' guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports/monographs and educational journals. For adoption or adaptation and translation of NCERT books by various States and UTs, copyright permission is granted by the NCERT on their request under the nationalised textbook programme. These are also used widely in schools affiliated to the Central Board of Secondary Education viz., Kendriya Vidyalayas, Jawahar Navodaya Vidyalayas, Tibetan Schools and several private schools in all States of the country and abroad.

The NCERT granted copyright of its textbooks to States and UTs, based on their request, for adoption or adaptation or translation for the year 2020–21. In total, 28 agencies of 23 States and UTs obtained copyright permission in 2020–21. All the States and UTs obtained copyright for NCERT textbooks published under NCF 2005 constituting a significant portion of the student community. During the year 2020–21, 779 publications were released. NCERT publishes research journals *Bhartiya Adhunik Shiksha*, *Journal of Indian Education*, *Prathmik Shikshak*, *The Primary Teacher*, *School Science*, *Indian Educational Review*, etc., pertaining to school education.

In its endeavour to make quality textbooks available at a reasonable price to the students in all parts of the country, NCERT has empanelled 992 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, 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 helps NCERT to ascertain the demand of the textbooks but also supply them on priority basis. Schools have the option either to collect their requirement of NCERT textbooks from any other empanelled vendor or directly from NCERT as per convenience. NCERT web portal also extends the facility to online order for NCERT publications to individuals (students, parents) and institutions. The orders so received at NCERT portal are delivered through registered book post at the customers' doorstep, for which NCERT bears the postal cost.

Publication Division, NCERT also supplies textbooks directly to various educational institutions, government agencies and school organisations, such as Navodaya Vidyalaya Samiti, Model Schools of different States, governments of Arunachal Pradesh, Sikkim and Gujarat. Besides textbooks, NCERT published several titles viz., teachers' guides, research monographs, supplementary reading material and books on vocational courses. NCERT supplied literacy tools to the government of Uttar Pradesh, Haryana and Himachal Pradesh.

Four regional production-cum-distribution centres of Publication Division, NCERT, located at Kolkata, Bengaluru, Ahmedabad and Guwahati are catering to the need of NCERT publications in Eastern, Southern, Western and North-Eastern parts of the country, respectively.

The Delhi headquarters caters to the requirement of North India. There are a total of 10 sales counters operated directly by NCERT, Publication Division. These counters are functional throughout the year at four RPDCs,



five Regional Institutes of Education and at the Delhi headquarters to ensure the easy availability of NCERT publications to individuals, students, parents and schools.

19. LIBRARY AND DOCUMENTATION DIVISION

The NCERT library is one of the most resourceful information centres in the country in the field of education and its interdisciplinary subjects. The library has the vast collection of books on psychology, environmental education, education for special needs groups, literature and languages, value education, adolescence education, science and mathematics education, social science education and gender studies, etc. Textual and supplementary reading material relating to school curriculum, reports of various committees or commissions, educational surveys and policy documents also find place in the library.

The main functions of the Library and Documentation Division (LDD) are to:

- ❑ Collect, organise and disseminate primary, secondary and tertiary resources on school education and also on teacher education;
- ❑ Support academics, researchers and students through conventional references, referral services and document delivery services;
- ❑ Facilitate in-service education of library personnel of States and UTs and other organisations by using manuals;
- ❑ Disseminate bibliographies, book reviews, current contents, indexing and abstracting of articles and press clippings;
- ❑ Disseminate LDD products and services through extension services;
- ❑ Facilitate readers through sharing of resources using DELNET.

II. Central Institute of Educational Technology

The Central Institute of Educational Technology (CIET), a constituent unit of NCERT, came into existence in 1984 with the 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 the school level. The institute has four major divisions, namely Department of Information and Communication Technology and Training Division (DICT&TD), Planning and Research Division (PRD), Media Production Division (MPD) and Engineering Division (ED).

DICT&TD is instrumental in creation of multimedia material for students and teachers, imparting training on the use of ICTs in the teaching-learning process and research methodology for ICTs in education, etc., for teachers and teacher-educators. It also organises faculty training on the usage of ICTs in education including Web 2.0 Tools, Wiki/WikiEducator, and Robotino, development and use of open-source material, etc. It also facilitates innovations in ICTs in education and their dissemination. Extension of ICT resources among schools, students and teachers in every nook and corner of the country is the motto of the Department, along with the continuous updating and maintenance of CIET and NCERT websites and other web applications.



The PRD looks after 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 Institutional Advisory Board (IAB) of CIET; Programme Advisory Committee (PAC) of NCERT and Project Advisory Board of the Ministry of Education (MoE), GoI, 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 headquarters.

The primary mandate of the Media Production Division (MPD) is to produce high quality educational Audio-Video programmes for school going children (aged 5 to 18 years) and teachers (primary and secondary). The division conducts its programmes with the help of the teams of enthusiastic and qualified Producers, Camerapersons, Floor Managers, Floor Assistants, Lightmen, Sound recordists, Editors, Graphic Artists and other similar personnel having the technical know-how of media productions. Once the programmes are produced and finalised after undergoing a rigorous preview by experts and other stakeholders, the programmes are out for dissemination through both offline and online modes including telecast on *Kishore Manch*, *SWAYAM PRABHA* channel #31 of the DTH-TV network and *Gyan Darshan* channels of *Doordarshan*. Similar to the curriculum-based video programmes, audio programmes are also developed that are broadcast through FM radio channels and community radio stations. These programmes are also available on CD/DVD formats for students, teachers as well as the general public. Apart from this, all curriculum-based video programmes can also be accessed from the DIKSHA portal and mobile app.

The Engineering Division (ED) is an important Division of the CIET, as its main mandate is to equip the institute with modern and latest technologies to help CIET to achieve its goals and objectives. The ED procures equipment as per the requirements and also maintains them. CIET has a state-of-the-art production facility and quality products are produced because of constant upgradation and maintenance of the equipment.

The CIET intends to create e-Contents (audio/video/multimedia/animation) covering all topics taught and learnt in schools and teacher training colleges and disseminates them using both offline and online (web-based and mobile platforms) avenues. Emerging technology will be used for the wider dissemination of organised textbooks. Our goal is to provide quality education to the children of this country using the latest technology.

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

PSS Central Institute of Vocational Education (PSSCIVE), Bhopal, a constituent unit of the NCERT, established in 1993 at Shyamla Hills, Bhopal, is a national apex research and development organisation in the field of vocational education in the country. It provides assistance to the MoE besides providing academic and technical support to a variety of vocational programmes and advises State Governments and Union Territory administrations 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; network with national and international organisations for promotion of vocational education; popularise vocational education; provide employability skills and establish student support system to ensure better employment opportunities; increase the reach of institute and establish mechanism for quality training to vocational teachers; up-skill vocational educators, improving access, efficiency and equity in vocational education and training at all levels of education; and collect, maintain and disseminate information, and popularise vocational education amongst the society, at large.

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

IV. Regional Institutes of Education

The Regional Institutes of Education (RIEs) located at Ajmer, Bhopal, Bhubaneswar, Mysuru and Umiam cater to the educational needs (pre-service and in-service education) of teachers and 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. They extend assistance for the implementation of the policies of the States and UTs, and also help in monitoring and evaluation of the Centrally Sponsored Schemes.

Major Academic Functions of RIEs

The following are the 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 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; and
- ❑ 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 material.

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 a 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 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.

1. REGIONAL INSTITUTE OF EDUCATION, AJMER

The Regional College of Education, Ajmer, was set up in the year 1963 as one of the constituent units of NCERT. Later, it was renamed as Regional Institute of Education (RIE), NCERT, Ajmer, in the year 1995. Since its inception, the Institute has been supporting the educational departments of the States and Union Territories (UTs) of the Northern Region viz., Haryana, Himachal Pradesh, Punjab, Rajasthan, Uttarakhand, Uttar Pradesh, Jammu and Kashmir, Ladakh, Delhi and Chandigarh in improving the quality of school education through its capacity building programmes, researches, extension activities, etc. The institute is affiliated to the Maharshi Dayanand Saraswati (MDS) University, Ajmer, and its pre-service teacher education programmes (B.A. B.Ed., B.Sc. B.Ed, B.Ed. and M.Ed.) are recognised by the NCTE, New Delhi. The institute has been accredited with A+ grade by the NAAC in the year 2017.

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



2. REGIONAL INSTITUTE OF EDUCATION, BHOPAL

The Regional Institute of Education, Bhopal, earlier known as Regional College of Education was established on 3 May 1963. It caters to the needs of pre-service and in-service teachers; and training needs pertaining to school education of the Western Region of the country, namely the States of Madhya Pradesh, Chhattisgarh, Gujarat, Maharashtra, Goa and Union Territories of Daman and Diu, and Dadra and Nagar Haveli.

3. REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

The Regional Institute of Education, Bhubaneswar, caters to both pre-service and in-service needs pertaining to school education of Odisha, Bihar, Jharkhand, West Bengal, Sikkim, Manipur, Mizoram, Meghalaya, Arunachal Pradesh, Nagaland, Tripura, and Andaman and Nicobar Islands. The following regular pre-service programmes are being conducted 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 Counseling is offered by the institute on distance-cum-face-to-face mode. The institute also acts as the Nodal Centre for Pre-Ph.D. course of Utkal University.

4. REGIONAL INSTITUTE OF EDUCATION, MYSURU

The Regional Institute of Education, Mysuru, a constituent unit of NCERT, New Delhi, is an apex institute for meeting the educational needs of Southern States. The Regional College of Education established on 1 August 1963 was later rechristened as Regional Institute of Education with effect from 18 April 1995. It is established with an intention to empower the five Southern States of India namely, Andhra Pradesh, Telangana, Karnataka, Kerala, Tamil Nadu, and two Union Territories viz., Puducherry and Lakshadweep by initiating in-service teachers' training programmes with emphasis on research and development, based on individual state requirements. The institute is affiliated to the University of Mysore. The undergraduate courses offered by the institute cater to five States and two UTs and the Post Graduate course are open for all States and UTs. Admissions are based on Common Entrance Examination conducted by the NCERT. Choice Based Credit System is adapted for all academic programmes. The institute is recognised for educational research related to different domains of school education and teacher education.

The institute is currently offering pre-service programmes with the revised curriculum, approved by the University of Mysore. The institute is offering four-year integrated programmes of B.Sc. B.Ed., B.A. B.Ed., six-year integrated programmes of M.Sc.Ed. in physics, chemistry and mathematics, two-year B. Ed. and M.Ed. programmes. The institute is also offering Diploma Course in Guidance and Counselling, a contact-cum-distance education mode programme. The Department of Education in Science and Mathematics (DESM) of the institute is recognised as a centre for research programmes. Presently, 64 scholars are pursuing Ph.D. at the institute.



RIE, Mysuru is a model institute for teacher training and educational research. Besides, it conducts capacity building programmes for the faculty of SCERTs, IASEs, CTEs and DIETs of the southern region in areas of teacher training, skill development for classroom, application of new pedagogical concepts, instructional strategies and classroom management techniques, material production, curriculum renewal, monitoring, textbook evaluation, educational research, etc.

5. NORTH EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM, MEGHALAYA

The North East Regional Institute of Education was set up at Shillong, the capital of the State of Meghalaya, in 1995 to cater to the educational needs of the North East States, which include Assam, Arunachal Pradesh, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura on the lines of NCERT's mandate. The institute aspires to emerge as a leader in the field of school education in the North-eastern region by playing the role of a pro-active organisation. The vision of the NERIE is to facilitate the 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.

The institute primarily works for capacity building of the State and district level resource institutions or teachers education institutions and State Boards of Secondary and Higher Secondary Education located in the region in undertaking research, development and training activities. The institute supports the promotion of various programmes of the Government of India and the NCERT and also encourages development of school education in the North East States.

The NERIE started its two-year regular full time B.Ed. course from the session 2015–16. The course has been approved by the National Council of Teacher Education (NCTE) and duly affiliated to North Eastern Hill University (NEHU), Shillong. Besides B.Ed., NERIE offers Diploma Course in Guidance and Counselling (DCGC) and a certificate course in Early Childhood Care and Education (ECCE).

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

1. DEMONSTRATION MULTIPURPOSE SCHOOL, AJMER

The 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 school education in the country. It is



a CBSE affiliated co-educational school providing quality education to over 700 students from pre-primary to Class 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/DVDs.

2. DEMONSTRATION MULTIPURPOSE SCHOOL, BHOPAL

Demonstration Multipurpose School, Bhopal affiliated to the CBSE came into existence in 1965. The school admits children 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 interns to observe, learn and participate in teaching through internship programmes. The school has a separate primary wing. The school has well-equipped science laboratories and a computer centre.

3. DEMONSTRATION MULTIPURPOSE SCHOOL, BHUBANESWAR

The Demonstration Multipurpose School, Bhubaneswar, was established in the year 1964 as a laboratory school. The school acts as a pace setting school in the Eastern Region of India by participating in research and development related to major areas of school education and mostly serves as a centre for teachers' training programmes of the Regional Institute of Education, Bhubaneswar. The school has started vocational programme at the secondary level, namely IT-ITes and Beauty and Wellness on a pilot basis under the guidance of PSSCIVE, Bhopal.

4. DEMONSTRATION MULTIPURPOSE SCHOOL, MYSURU

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

MAJOR ACHIEVEMENTS OF THE COUNCIL IN 2020–21

Initiatives during COVID-19 Pandemic Times

The NCERT took up various initiatives like development of the PRAGYATA guidelines on digital education, students' learning enhancement guidelines, NISHTHA—National Initiative for School Heads' and Teachers' for their Holistic Advancement: Online, *Alternative Academic Calendar*, PM eVidya Radio, community radio and podcasts, e-Content for visually and hearing impaired students, e-textbooks and National Repository of Open Educational Resources



(NROER), Cyber safety and cyber bullying, MANODARPAN for psychosocial support, counselling services for school children, SAHYOG: Guidance for Mental Well-being of Children, and development of tools for learning enhancement, survey for assessing teaching-learning experiences at home in COVID-19 period that helped in mitigating the impact of the pandemic.

Publications

The NCERT continues with the publication of school textbooks, workbooks, supplementary readers, teachers' guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports or monographs and educational journals. Apart from non-textual material, textbooks for different subjects for Classes 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 material, teachers' handbooks, source books, research reports and six educational journals are brought out every year. The NCERT textbooks are freely adopted by States under their nationalised textbooks programme. They are also used widely in schools affiliated to the CBSE, KVS, NVS, Tibetan Schools and several public schools in all States. Many States have obtained copyright for NCERT textbooks. The Council has embedded the textbooks with QR Codes, thus, making them energised textbooks.

During the year, the Council brought out the publications — Bridge Course for Out-of-School Children; *Readiness Module and Practice Sheets (Level I–IV)*; *Firkee Bachchon Ki* (Children's Magazine); *Prathamik Shikshak*; *The Primary Teacher*; *Shiksha me Samaveshan: Vidyalaya Prabandhan Samiti ke liye Sandarshika*; *Inclusion in Education: A Manual for School Management Committee*; *Educational Rights of Children with Special Needs: Frequently Asked Questions*; *Uttar-Purvi Bharat— Log, Itihas aur Sanskriti*; *Shumal Mashirui Hindustan: Awam, Tareeqh aur Tehzeeb*; *An Introduction to Indian Art – Part 2*; *Indian Educational Review*; *Bharatiya Adhunik Shiksha*; *Journal of Indian Education (JIE)*; *Voices of Teachers and Teacher Educators (VTTE)* (Online Journal); *Students' Textbooks on Vocational Courses*; *Guidelines, Modules and Videos for Pre-Vocational Education for Classes VI to VIII*; *Guidelines on On-the-Job Training for School Students*; *Guideline and Brochure on Diploma in Vocational Education and Training (DVET)*; *Quarterly Bulletin on Vocational Education*; etc.

Research Studies

The Council conducted studies in different areas of school education and teacher education viz., 'A Study of Awareness and Implementation of Continuous and Comprehensive Evaluation (CCE) in light of the RTE Act, 2009 at the Elementary Stage'; 'Review of Current Textbooks at the Primary Stage'; 'Review of NCERT Curriculum Syllabi and Textbooks in Hindi, English, Urdu and Sanskrit Languages for School Education'; 'Educational Research Survey: Gender Concerns in School Education in India'; 'Status of Girls' Hostel Scheme: An Exploratory Study focusing on Scheduled Caste (SC) Girls at the Secondary Stage'; 'Participation and Performance of Girls in National Talent Search Scheme (NTSS): A Spatial-temporal Study from the Viewpoint of Gender Gap Analysis'; 'Case Study of Learning Environment in Primary Schools',



'Practicing Art Integrated Learning'; 'Enriching Teacher Education Institutions (DIETs) for Promoting Sustainable Development: A Pilot Project'; 'A Study of Learning Resources including Simple Explicit Animation (SEA) Approach in understanding the Concepts of Chemistry and Reaction Mechanism in Chemistry at the Senior Secondary Level'; 'Augmented Reality (AR) based Mathematics Lab Activities as a Sustainable Supplement to Traditional'; 'Learning Outcomes of Children with Learning Disabilities: Exploring the Determinants in Inclusive Classroom'; 'Evaluation of Effective Implementation of D.El.Ed. Programme in Andhra Pradesh'; 'Implementing Interventions at the Elementary School Stage: A Block Level Research Project'; 'Impact Study on English Language Training Programme (ELTP) of Karnataka State'; 'Textbook Analysis at the Elementary Stage Education of Manipur'; 'A Study on the Perception of the Educational Stakeholders on Mother Tongue Education in Mizoram'; 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 the West, Chilika in the East, Rigvoi in the North East, Hurda in the North and Hunsui in the South. Besides, one block in Tripura has also 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 work on their disciplines directly related to education. In 2020–21, ten candidates have been given Doctoral Fellowship from the NCERT.

Development Activities

The development works of the Council include: *Alternative Academic Calendar* in view of the COVID-19 Situation; Infographics/Posters; Test Items—Worksheets and Quiz Items; Scripts for Byte Sized Video Programmes based on Learning Outcomes; Foundational Literacy and Numeracy Guidelines and Revision and Codification of Learning Outcomes from Preschool up to Grade III; Online Course on Pedagogy of Environmental Studies; e-Content in Teaching Learning of Environmental Studies (EVS), Sciences, Mathematics, and Social Sciences, Hindi, English, Urdu and Sanskrit; in Play Based School Preparation Module; Working Papers on Early Childhood Care and Education, on Social Science and Health or Physical Education and Yoga on Science Education, on Mathematics Education, on Environmental Education, on Value Education in Schools, on Guidance and Counselling, on Education for Gender Equality and Empowerment, on Emerging Role of community in school education, etc.

The Council was also involved in the development of Learning Outcomes in Hindi, English, Urdu and Sanskrit; and for the subjects — Biology, Biotechnology, Chemistry, Physics and Mathematics at the higher secondary stage. A Compendium of Ancient Indian Educational Thoughts in Sanskrit; Guidelines 'Nurturing Gifted and Talented Children: A Guiding Framework'; Handbook for Teachers on Education of Children with Chronic Health



Impairments in Inclusive Classrooms; Educational Roadmap for Quality Education for Children Residing in Difficult Terrains in the Country; Transformatory Material for Awareness Generation and Attitudinal Change with respect to Gender; Training Material for Teachers and Teacher–educators on Transgender Concerns in School Education; Online Course in Social Sciences for Teachers’ Teaching; Audio-Video Scripts Based on ‘Handbook on Understanding Science through Activities, Games, Toys and Art Forms’; Tactile Books in Science and Mathematics at the upper primary stage; Certificate Course on Curriculum Design; were developed.

During the year, *Sangeet Shikshak Sandarshika*- A Handbook in Music; Teachers’ Handbooks on Art Integrated Learning; Textbook in Visual Arts; Textbooks in Music; Textbooks in Hindustani Music–*Gayan Evam Vadan* and *Tabla Evam Pakhawaj*; Textbook in Carnatic Music–*Vocal and Melodic*; In-service Teacher Professional Development Modules for Science, Mathematics, Social Science and Language Teachers; Guidelines for the Development of e-Content for Children with Disabilities; Module for Introducing India in Korean Textbooks; Mechatronics Laboratory; NCERT Institutional Repository; Online Certificate Course on Research Methodology in Education; Educational Media Programmes; e-Resources for the School and Teacher Education (Augmented Reality – Virtual Reality); ICT in Education courses for Teachers and Students; Digital Resources (Video films) on different topics of job roles in various sectors; Short Video films for Pre-vocational Courses; Digital Resources Video Scripts for Vocational Subjects; Student Textbooks on Different Job Roles; Modules of Diploma in Vocational Education and Training (DVET) in Distance Mode; Science, Mathematics, Geography and Environmental Education Theme Park; *Muskurata Bachpan*: An Early Childhood Education (ECE) Programme; Sustainable Development Goals (SDGs) Module for Secondary Level; Dynamic Website for Tracking of Programmes, Creating Programme Database, and Sharing and Feedback Mechanism; *Handbook on Experiments and Learning Outcomes in Science* at the Secondary Level, etc., were also some of the development activities undertaken by the Council.

Educational Technology

Understanding the importance of digital technology to ensure quality learning to our students during the COVID-19 pandemic period, the NCERT has initiated a webinar series to orient teachers, students and other stakeholders on various ICT tools, digital initiatives at the national level, emerging trends in educational technology, cyber safety and security. As a part of the implementation of *Alternative Academic Calendar* (AAC) developed by NCERT for Classes I to XII, continuous online education support through 12 PM eVidya DTH TV channels was started. Curriculum-based video programmes are telecast by the NCERT for primary, upper primary, secondary and higher secondary level students on a daily basis. These programmes are simultaneously telecast on *DD-Free Dish*, *Tata Sky*, *Videocon*, *Sun Direct*, *Dish-TV*, and the official YouTube channel of NCERT and *Jio TV* Mobile App. Interactive Voice Response System (IVRS) number 8800440559 is used for obtaining feedback from the viewers and supporting live phone calls with the experts in CIET-NCERT studio. The Council developed e-Content which include images, 1100 audio programmes, 1933 video



programmes, interactive, graphics, animations, digital books, timelines, digital maps, etc., for the entire syllabus of NCERT at all stages of school education.

SWAYAM PRABHA DTH channel telecast educational video programmes for secondary and senior secondary students and teachers. CIET, NCERT is the national coordinator for one DTH TV channel i.e., *Kishore Manch* (#31) and has started feeding a 24×7 slot. Every day six hours fresh slot was provided by CIET which gets repeated three times in 24 hours to offer learning opportunities for the stakeholders.

The National Repository of Open Educational Resources (NROER) is an online repository (<http://nroer.gov.in> (NROER)) in which the learners can freely access and use resources under the CC by SA license. NROER houses a total of 19,496 contents including 700 collections, 5934 documents, 1453 interactive, 2956 audios, 2582 images and 6571 videos.

e-Pathshala, a portal/app developed and launched in November 2015, hosts educational resources for teachers, students, parents, researchers and educators. It 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 NCERT, periodicals, supplements, teacher training modules and a variety of other print and non-print materials. e-Pathshala contains 372 digital textbooks in ePub format, 131 textbooks (Hindi and Sanskrit medium), 115 textbooks in English medium and 126 textbooks in Urdu medium, 115 textbooks (Hindi and Sanskrit medium) for differently abled, 101 textbooks in English medium and 126 textbooks in Urdu medium in Unicode fonts. NCERT has embedded QR codes linked with e-Resources with all the textbooks. 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 30 MOOCs in 11 subjects for Class XI and XII and three generic courses on Food and Nutrition and Urdu for around 48,000 learners.

Capacity Building Programmes

The Council organised a mega capacity building programme 'NISHTHA' for the capacity building of teachers and school heads at the elementary level on learner-centred pedagogies to improve the learning outcomes of students. Around 24 lakh teachers and schools heads were covered under online NISHTHA at the elementary stage. Eighteen generic and subject specific pedagogy modules were used for the online training programme. The Council conducts capacity building or orientation or training programmes for master trainers or key resource persons for ensuring quality education at all levels of school and teacher education. During the year 2020, the Council conducted the programmes in areas of school health and wellness, guidance and counselling, vocational education, vocational pedagogy and employability skills, research methodology, global citizenship education, educational kits, contextualisation of curriculum, waste management, setting up of maths lab, science, social science and mathematics, language, inclusive education, textbook development, ICT, etc.



Extension Activities

The extension programmes of the Council include National Conference on Early Childhood Education, Minority Cell and Activities of the Minority Cell, Guidance and Counselling Services to Support Mental Health Challenges of Students during and after COVID-19, Meeting on Strengthening of DIETs; Integrated Multidisciplinary Professional Advancement Course for Teachers; National Webinar on Teacher Education: Concerns, Challenges and Innovations; National Awards for Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions; Information Literacy Programme for the users of NCERT Library; Resources and Support for Web and Online Activities; Resource-cum-Activity Centre in ET/ICT for school and Teacher Training, International Conference on Emerging Trends in ICT in Education and Training, National Conference on Transforming Vocational Education and Training for Excellence: Perspective and Challenges, National and Regional Consultation Meeting-cum-Workshop for Implementation of Vocational Education in Schools under *Samagra Shiksha*; Diploma in Vocational Education and Training (DVET); Extension Lecture Series; Expression Series on Eminent Personalities, Internship Programme, Working with the Community, Academic Lecture Series, Fit India School Week, Celebration of the Independence Day, Republic Day, Teachers' Day, Mahatma Gandhi's 150th Birth Anniversary, World Population Day, International Mother Language Day, International Women's Day, National Science Day, and National Education Day; Diploma Course in Guidance and Counselling (Self Financed, Blended Mode); National Seminar of Issues and Challenges in Minority Language Education, National Library of Educational and Psychological Tests (NLEPT), Centre for Popularisation of Science, meetings of Screening-cum-Progress Monitoring Committee (SPMC) of Educational Research and Innovations Committee (ERIC), etc.

Vocational Education

In the area of vocational education, the Council published 152 Vocational Curriculum for two years as per the Job Roles and 40 student textbooks in 19 sectors, prepared guidelines for pre-vocational education for Classes VI to VIII, on On-the-Job Training of vocational students in schools and Diploma in Vocational Education and Training (DVET), developed digital resources like video films and power point presentations on various job roles for Classes IX and XI, video films on pre-vocational courses, conducted orientation programmes for key functionaries on vocational pedagogy, employability skills, job roles, vocational education, etc., covering all States and UTs for strengthening vocational education in schools, organised a national conference on transforming vocational education and training for excellence: perspective and challenges and regional and national consultation meetings for implementation of vocational education in schools under *Samagra Shiksha*, one-year Diploma course in vocational education and training programme, setting up of model vocational education programme in 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 under the Innovative Model of Vocational Education in Schools, etc.



International Collaborations and International Linkages

Keeping in view the importance of international cooperation in the field of school education, the Council hosts foreign delegations, facilitates their interaction with different departments and constituent units pertaining to areas critical to their interest and needs, such as educational policies, curriculum frameworks, pre-service and in-service teachers' education programmes, physical education, vocational education, ICT and ET, and conducts workshops, seminars and conferences involving MoUs signed with foreign institutions.

In recent years, the NCERT has signed MoUs with institutions like the Florida Centre for Reading Research at Florida State University (FSU), USA, and College of Education, University of St. Francis, USA; Academy of Korean Studies (AKS), the Republic of Korea; Mauritius Institute of Education (MIE), Mauritius, and Curtin University, Australia.





2. Initiatives during the COVID-19 Pandemic

The COVID-19 pandemic disrupted the education system all over the world. However, the systemic changes made and measures taken up by organisations for addressing the issues and challenges helped revive the education sector to some extent. The NCERT rose to the occasion and came up with various initiatives like development of PRAGYATA guidelines on digital education, students' learning enhancement guidelines, NISHTHA — National Initiative for School Heads and Teachers for their Holistic Advancement (Online), Alternative Academic Calendar, PM eVidya, radio, community radio and podcasts, e-content for visually and hearing impaired students, e-textbooks and National Repository of Open Educational Resources (NROER), cyber safety and cyber bullying, MANODARPAN for psychosocial support, counselling services for schoolchildren, SAHYOG: Guidance for Mental Well-being of Children, and development of tools for learning enhancement survey for assessing teaching-learning experiences at home during the COVID-19 period that helped mitigate the impact of the pandemic.

PRAGYATA Guidelines on Digital Education

The PRAGYATA guidelines have been developed with a focus on methodology, time spent, etc., for online or blended or digital education for students, who are at home due to the closure of schools. These guidelines provide a roadmap or pointers to enhance the quality of education through the online mode. The guidelines will be relevant and useful for a diverse set of stakeholders, including school heads, teachers, parents, teacher-educators and students. The guidelines recommend screen time for different categories of students. It also provides sufficient Dos and Don'ts regarding ergonomics and cyber safety. There are infographics on how to use devices and the posture one must maintain during online classes. The guidelines can be accessed at https://mhrd.gov.in/sites/upload_files/mhrd/files/pragyata-guidelines_0.pdf.

Students' Learning Enhancement Guidelines

During the COVID-19 pandemic, formal learning that took place in schools in the form of face-to-face interactions between teachers and students, has been replaced by the use of various alternative modes — online, TV, mobile, radio, textbooks, etc. The Ministry of Education and the States/UTs have been making efforts for providing education to children at home through alternative means of delivery, such as distribution of textbooks at homes, telephonic guidance by teachers, online and digital content through various media, online classes conducted by teachers, activity based learning through *Alternative Academic Calendar* developed by the NCERT, etc.

With a view to address issues related to interrupted learning among students, during and after the lockdown, the Ministry of Education (MoE) entrusted the NCERT with the task of constituting a committee, comprising academic and curricular experts drawn from NCERT, NIEPA, CBSE, KVS and NVS. The Curriculum Group coordinated the tasks of this committee and conducted a survey in KVS, NVS and CBSE schools for collecting information about various digital modes being used by students to receive online education and their concerns regarding children not having digital devices, and also held discussions with SCERTs to gather information about the initiatives taken by them in their respective States and UTs. Meanwhile, the Department of School Education and Literacy also collected a report from the States/UTs on their continuous learning plans, particularly, with regard to learners, who have no access to any mode of digital device.

The ensuing suggestions for Learning Enhancement (LE) (during the challenging times of the COVID-19 pandemic) are prepared based on the recommendations of the aforementioned committee and reports of States/UTs for the following three situations.

- ❑ Learning Enhancement during COVID-19 for students without digital devices
- ❑ Learning Enhancement during COVID-19 for students with limited accessibility to digital devices
- ❑ Learning Enhancement during COVID-19 for students with digital devices

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

NISHTHA, an initiative for integrated teacher training that was earlier conducted face-to-face, was converted into the online mode in wake of the pandemic. The online NISHTHA programme was launched by Minister of Education, Ramesh Pokhriyal 'Nishank', on 6 October 2020 for providing training to 24 lakh teachers and school heads and also to reach out to teachers working under various school boards like CBSE, ICSE, state boards, etc.

NISHTHA
ONLINE
on **DIKSHA**

National Initiative for School Heads' and Teachers' Holistic Advancement

Launching on
6th October 2020

Courses: 18 modules covering curricular, pedagogic, generic and systemic concerns
Duration: Six fortnights starting from October, 2020
Coverage: About 24.5 lakhs teachers teaching at primary and upper primary stage (Classes 1-8)

National Council of Educational Research and Training Sri Aurobindo Marg, New Delhi - 110016



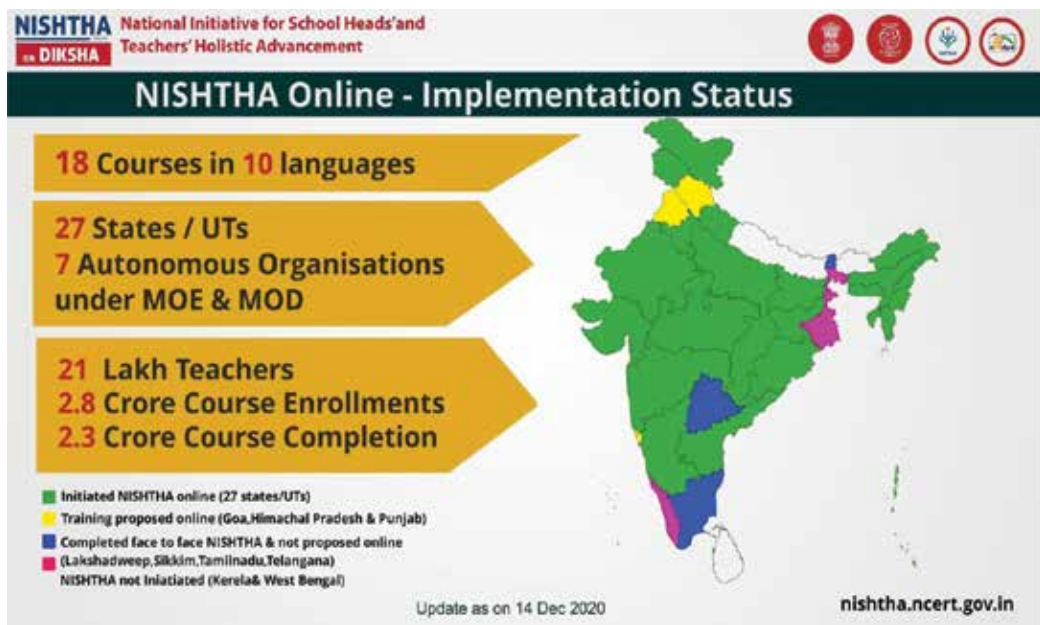
There are 18 modules in this programme — 12 for teachers and five for school heads, while one is a specialised module on teaching and learning during the COVID-19 times. Each module consists of guidelines, primers, training package with QR coded e-Content, videos on each module, and other e-resources.

The details of the 18 modules of NISHTHA can be accessed on the DIKSHA app.

S.No.	Name of the Course (Medium: English)	Course URL/Link
1.	Curriculum and Inclusive Classrooms	https://diksha.gov.in/explore-course/course/do_3130958316361646081366
2.	Developing Personal-social Qualities for Creating a Safe and Healthy School Environment	https://diksha.gov.in/explore-course/course/do_31309299100080537611231
3.	Health and Well-being in Schools	https://diksha.gov.in/explore-course/course/do_31309298117735219211447
4.	Integrating Gender in the Teaching Learning Process	https://diksha.gov.in/explore-course/course/do_31309298203149107211357
5.	Integration of ICT in Teaching, Learning and Assessment	https://diksha.gov.in/explore-course/course/do_3130887995072839681228
6.	Art Integrated Learning	https://diksha.gov.in/explore-course/course/do_31309426680632115211717
7.	School based Assessment	https://diksha.gov.in/explore-course/course/do_31309352558542848011350
8.	Pedagogy of Environmental Studies	https://diksha.gov.in/explore-course/course/do_3130986708324761601265
9.	Pedagogy of Mathematics	https://diksha.gov.in/explore-course/course/do_31309427486152294411916
10.	Pedagogy of Social Sciences	https://diksha.gov.in/explore-course/course/do_31309428485455872011816
11.	Pedagogy of Languages	https://diksha.gov.in/explore-course/course/do_31309504776588492812187
12.	Pedagogy of Science	https://diksha.gov.in/explore-course/course/do_31309438608236544011901
13.	School Leadership: Concepts and Applications	https://diksha.gov.in/explore-course/course/do_31309428926386176011846
14.	Initiatives in School Education	https://diksha.gov.in/explore-course/course/do_31309438411992268811578
15.	Preschool Education	https://diksha.gov.in/explore-course/course/do_31309439906432614411919
16.	Pre-vocational Education	https://diksha.gov.in/explore-course/course/do_31309497206914252812180
17.	Covid-19 Scenario: Addressing Challenges in School Education	https://diksha.gov.in/explore-course/course/do_31309505940769177611934
18.	Understanding Rights, Child Sexual Abuse (CSA) and the Protection of Children from Sexual Offences (POCSO) Act, 2012	https://diksha.gov.in/explore-course/course/do_31310560543064064013027



S.No.	Name of the Course (Medium: Hindi)	Course URL/Link
1.	पाठ्यचर्या और समावेशी कक्षा	https://diksha.gov.in/explore-course/course/do_31311830477250560011677
2.	स्वस्थ विद्यालयी परिवेश निर्मित करने के लिए व्यक्तिगत-सामाजिक योग्यता विकसित करना	https://diksha.gov.in/explore-course/course/do_3131179451048837121644
3.	विद्यालय में स्वास्थ्य और कल्याण	https://diksha.gov.in/explore-course/course/do_31311795316885094411608
4.	शिक्षण-अधिगम प्रक्रिया में जेंडर आयामों की प्रासंगिकता	https://diksha.gov.in/explore-course/course/do_31313333718230630411096
5.	शिक्षण, अधिगम और मूल्यांकन में आई.सी.टी. (सूचना एवं संचार प्रौद्योगिकी) का समन्वय	https://diksha.gov.in/explore-course/course/do_31313406305859174411460
6.	कला समेकित शिक्षा	https://diksha.gov.in/explore-course/course/do_3131333472438517761805



NISHTHA online is being conducted through the DIKSHA portal, which is accessible to all individuals with a mobile phone and Internet connectivity. The NISHTHA online training has a coverage of 21 lakh teachers, 2.8 crore enrolments and 2.3 crore course completion from 27 States/UTs and seven autonomous bodies till 14 December 2020. The programme intends to cover around 42 lakh teachers at the elementary stage.

Alternative Academic Calendar

The COVID-19 pandemic, which suddenly started from March 2020, forced students and teachers to stay at home. With a view to provide school education to all children at home, using alternative ways of maintaining joyful learning approach with the participation of their parents under the guidance of teachers, the NCERT has come up with the *Alternative Academic Calendar* (AAC) across



four stages— Primary, Upper Primary, Secondary and Higher Secondary. This Calendar focuses on learning outcomes. Hence, it covers syllabi of different stages implemented in different States and UTs.

The salient features of AAC are as follows.

- ❑ To focus on learning outcomes, addressing the themes in syllabi across the stages implemented in States/UTs
- ❑ To provide links for many quality e-Resources available on e-Pathshala, NROER, DIKSHA portals and other websites
- ❑ To conduct physical and mental health activities like yoga and physical exercises, dance and music, etc., for children which they can do at home under the guidance of teachers and parents to reduce stress and anxiety
- ❑ To guide teachers, parents and students on how to deal with the physical and mental health issues
- ❑ To guide schools and teachers on the assessment of progress in learning of students, using alternative approaches like project works, assignments, reports, etc.
- ❑ To work as a bridge between learning that took place during the lockdown with future learning in school
- ❑ To provide adequate space for fun activities in arts, health and physical education, including yoga, in which parents can equally participate with children
- ❑ To make teachers aware about different social media tools and their usages

In view of disseminating the guidelines for implementing the calendar, the NCERT conducted interactive sessions on television — DTH SWAYAM PRABHA channel daily for all stages of school education. In these sessions, NCERT's faculty members, experts from other institutions and school teachers interacted with students, teachers and parents on different activities given in the Calendar. This Calendar is also being implemented by the States/UTs, KVS, NVS and CBSE schools. Some States/UTs translated this in their State languages. Drawing insights from the activities given in the Calendar, teachers designed many more contextual activities, assignments and project works for students. The weblink for *Alternative Academic Calendar* is <http://ncert.nic.in/aac.html>.

PM eVidya

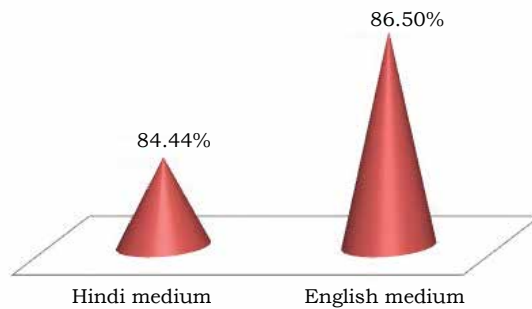
As a part of the *Atma Nirbhar Bharat* programme, a comprehensive initiative for using technology with equity, called PM eVidya has been initiated, which unifies all efforts related to digital/online/on-air education to enable multi-mode access to education. PM eVidya has the following components.

- ❑ DIKSHA — One nation, one digital education platform
- ❑ One class, one TV channel — SWAYAM PRABHA
- ❑ E-content for open school
- ❑ Extensive use of radio, community radio and podcast
- ❑ E-content for visually and hearing impaired students

In this manner, the programme aims to establish a coherent access of learning resources across TV, radio, podcast and DIKSHA. Sign language videos are also being developed and disseminated. The trial run of all 12 DTH TV Channels



**Unique Chapter Linked on DIKSHA for Classes I–XII
for all Chapters—English and Hindi Medium
(16 December 2020)**



started on 1 September 2020. This covers chapter based video resources for Classes I–XII. Each video has a QR code that can be embedded in them that can be scanned through mobile phone, which will lead to the DIKSHA app to access explanation of content and other resources. This ensures anytime, anywhere access of these resources in a coherent manner. The status of coverage on DIKSHA is given below.

During the COVID-19 pandemic, a large number of educational radio programmes were being broadcast by the 12 *Gyan Vani FM Radio Stations* and 65 Community Radio Stations (CRS) across the country, and also through iRadio and podcasts.

Resilient and Coherent Services through Radio, Community Radio and Podcasts

Radio broadcasting is being used for children in remote areas where internet facilities are not available. The NCERT has geared up its TV and Radio programme production process and produced high quality audio/radio programmes with effective media treatment, such as apt music, sound effects and involvement of seasoned and refined artists. These radio programmes mainly produced in Hindi, English, Sanskrit and Urdu are also available at <https://ciet.nic.in/radio.php?&ln=en&ln=en>. The programmes are produced under two major categories — curriculum based audio programmes from Classes I to VIII; and enrichment, infotainment and edutainment programmes. In all, there are about 2000 audio-radio programmes produced in Hindi, English, Urdu and Sanskrit. Curriculum based educational radio programmes are also broadcast on 226 radio stations. For the purpose of coherence, these programmes are regularly disseminated through DIKSHA, ePathshala and NROER portals and mobile apps, and are broadcast by 12 *Gyan Vani FM Radio Stations*, i-Radio and *Jio Saavn* mobile app. Audio programmes are broadcast daily for one hour from *Gyan Vani FM* for 30 minutes in the forenoon and 30 minutes in the afternoon. Out of these, 220 programmes are shared with 60 Community Radio Stations (CRS) across the country. About 800 radio programmes have been shared with the All India Radio (AIR) to ensure a wider outreach.

Continuous Orientation on Educational Technology

COVID-19 has forced every teacher and student to utilise the potentials of digital technology and continue with the teaching–learning activity remotely. Teachers and students were struggling and facing challenges due to lack of awareness, insufficient competency in handling digital technology and lack of digital infrastructure. It was a time when everyone started looking to improve their digital competency. Keeping in view the requirements, CIET, NCERT, initiated a webinar series, focusing to orient teachers, students and other stakeholders on various ICT tools, digital initiatives at the national level,



emerging trends in educational technology, and cyber safety and security. A variety of sessions in English and Hindi have been conducted live, which are simultaneously cast through *YouTube*, as well as, 12 PM eVidya DTH TV channels and Jio TV mobile App. More than 345 live sessions on ICT tools for teaching learning and assessment each of one hour duration have been organised. A repository is also created for easy reference and can be accessed at <https://ciet.nic.in/pages.php?id=webinar&ln=en>.

Production and Dissemination of e-Contents for CWSN/DIVYANG

The NCERT has signed a Memorandum of Understanding (MoU) with the Indian Sign Language Research and Training Centre (ISLRTC), Ministry of Social Justice and Empowerment, Government of India, for the development of e-Contents in sign language. It has also started the production and telecast of Indian Sign Language (ISL) videos on PM eVidya DTH TV channels and its further dissemination on the DIKSHA portal. Live telecast on CWSN concerns have also been initiated on PM eVidya DTH TV channels with active support from ISLRTC.

One DTH channel is being operated specifically for hearing impaired students in sign language. Fifty-five NCERT textbooks of different grades are uploaded on the DIKSHA portal in audio format. Ten videos for CWSN from CIET have also been uploaded on the DIKSHA portal and 25 NCERT textbooks have been converted into Digital Accessible Information System (DAISY) format, which is mostly in English and Hindi language.

National Repository of Open Educational Resources (NROER) and Textbooks

In the wake of the pandemic, the NROER e-resources are being converged on the DIKSHA portal through a systematic taxonomy and user-friendly search system to give shape to one nation, one digital education platform, available at <https://nroer.gov.in/home/e-library/>. During the pandemic, the e-textbooks have also been converged on DIKSHA to give a seamless experience to users through a single platform. The NCERT e-textbooks can be accessed using e-Pathshala (<https://epathshala.nic.in/>) portal and mobile app (Android, iOS, Windows). More than 600 digital books, including 377 e-textbooks (Classes I to XII) and 3,500 pieces of audio and video content of NCERT, are available in the public domain in various languages (Hindi, English, Sanskrit and Urdu).

Cyber Safety and Cyber Bullying

In view of the sudden and unprecedented expansion in online activities by teachers, students, schools, etc., during the pandemic, and the problems associated therein, such as possibilities of cyber bullying and issues of cyber safety, particularly, for young users, the NCERT has come up with a set of solutions. The guidelines on cyber safety for students, parents and teachers contain a detailed list of dos and don'ts while using the Internet. The booklet provides guidance on how to keep one's password safe and handle cyber bullying. It cautions students against befriending people they do not know offline, and posting sensitive information and images or videos online. It also advises students to report immediately to the support team of the networking site, if they suspect their account has been hacked or stolen.

MANODARPAN for Psychosocial Support

In order to provide psychosocial support for mental health and well-being of students during the COVID-19 outbreak and beyond, the MANODARPAN



initiative has been launched by the MoE, GoI, as a part of *Atmanirbhar Bharat Abhiyan*. The initiative was inaugurated by the Union Minister of Education on 21 July 2020. The Minister also launched the national toll-free helpline number (8448440632). A total of 7,098 calls were received from 21 July 2020 to 11 October 2020.

The MANODARPAN Cell was set up by the MoE in the NCERT on 14 October 2020 for providing administrative and technical support, as well as, secretarial assistance to the working group. To work on various activities of MANODARPAN, three sub-groups were constituted. Meetings of these three sub-groups were held on 4 and 7 December 2020. The aim of MANODARPAN is to help students live their life happily, effectively and productively, and become resilient over time with the help of life skills even in the face of challenges and roadblocks. Under the initiative, students from schools, universities, colleges and institutions of higher education are being covered.

An orientation of the second batch of 80 counsellors associated with the MANODARPAN helpline was organised on 11 December 2020. Guidelines for the counsellors to provide psychosocial support to callers were shared on the MANODARPAN helpline. The number of calls received and caller tele-counselled, up to 15 December, was 8,618. An analysis of calls received from school students, youth and parents was undertaken for the months of July to September 2020. The analysis revealed that school students at the middle and secondary stages were mostly concerned with academic and career related issues, such as difficulties in online learning, inappropriate time management, strategies for improving study habits, etc. Youth were concerned about not getting a regular salary, final examinations at UG/PG level, facing anxiety due to uncertainty in job placements and semester examinations, etc. Parents were mostly concerned about academic and career issues, such as lack of concentration, reopening of schools, change in behavioural patterns, mood swings of children, etc.

The following components are included in the MANODARPAN initiative.

- ❑ Advisory Guidelines for students, teachers and faculty of school systems and universities along with families
- ❑ Web page on the Ministry of Education's website, which carries advisory, practical tips, posters, videos, dos and don'ts for psychosocial support, FAQs and online query system
- ❑ The webpage is available at:
 - <http://manodarpan.mhrd.gov.in/> and
 - <https://cbse.nic.in/newsite/index.html>
- ❑ National toll-free helpline by the Ministry of Education for countrywide outreach to students from school, universities and colleges; this helpline is managed by a pool of experienced counsellors/psychologists and other mental health professionals and will function even after the pandemic COVID-19 is over
- ❑ Preparation of a national level database and directory of counsellors at school and university level, whose services can be offered voluntarily for tele-counselling service on the National Helpline



- ❑ Interactive online chat platform for contact, counselling and guidance by psychologists and other mental health professionals being developed for students, teachers and families during COVID-19 and beyond
- ❑ Webinars, audio-visual resources, including videos, posters, flyers, comics, and short films to be uploaded as additional resource material on the webpage;
- ❑ Crowd sourcing from students all over the country to be encouraged.

A Working Group, with experts from the fields of education, mental health and psychosocial issues as its members, has been set up to monitor and promote mental health issues and concerns of students and to facilitate the provision of support to address the mental health and psychosocial aspects during and after the COVID-19 lockdown, through counselling services, online resources and helpline number. A live interactive session called ‘SAHYOG’ is being telecast to provide guidance on handling stress and other related concerns of students. These sessions are being held by school counsellors and experts on SWAYAM PRABHA channel daily from 5–5.30pm. In JNVs, 200 teachers trained by NCERT on ‘Guidance and Counselling’ are also engaged in providing counselling to students. In addition, every House Master and Principal is also talking to students regularly to render psychological support.

Counselling Services for Schoolchildren

Various steps have been taken to reach out to school students and their primary stakeholders (parents and teachers) to help them maintain mental and emotional well-being during the COVID-19 pandemic times. To help school students across the country share their concerns and seek help to deal with stress, anxiety and related mental health concerns during and after COVID-19, ‘NCERT Counselling Services for Schoolchildren’ was started in April 2020 on phone and e-mail. This service was provided free of charge by about 270 trained counsellors across different regions of the country. To augment the *Alternative Academic Calendar* (AAC), sessions at primary, upper primary and secondary stages were held on SWAYAM PRABHA channel that included topics related to mental health concerns of children. Guidelines to address the mental health concerns, such as dealing with stress and anxiety, have been developed for students, teachers and parents. These are for elementary and secondary stages and have been included in the *Alternative Academic Calendar*.

‘SAHYOG’: Guidance for Mental Well-being of children

Live interactive sessions called ‘SAHYOG: Guidance for Mental Well-being of Children’ are telecast to provide guidance on handling stress and related concerns of students. These sessions, being moderated by counsellors and experts on the SWAYAM PRABHA channel, are telecast daily from 5 to 5.30pm.

Development of Tools for Learning Enhancement Survey for assessing Teaching-learning Experiences at Home during the COVID-19 Period

The survey sought to seek information on participants’ opinion about online education, use of different digital and other tools, subjects in which children faced difficulties, and awareness about NCERT’s *Alternative Academic Calendar*. The organisation-wise data on different issues related to online education were collected using survey tools for students, teachers, parents and school



principals to collect information regarding their teaching–learning experience during the pandemic period. The findings revealed that about 60–70 per cent of the participants (students, teachers, parents and school principals from KVS, NVS and CBSE) shared that the teaching and learning during the COVID-19 period was joyful and satisfactory. About 20–30 per cent shared that they experienced difficulty and about 10–20 per cent said it was cumbersome for them.

Online Quizzes for Students and Teachers

In order to keep the students and teachers engaged in a meaningful learning environment, various online events were organised. NCERT, in collaboration with various partners, organised quizzes on Yoga, Indian Constitution, Discover Gandhi, Cyber Safety and Security, NEP 2020, Republic Day, *Swatantra Bharat*, etc. These events motivated the stakeholders to come in large numbers and participate and enrich their intellectual horizon.

Continuous Professional Development (CPD) Courses on DIKSHA

The NCERT offered continuous professional development courses for teachers through DIKSHA during the pandemic to support teachers to continue with their teaching–learning activities. Some of the courses offered by the NCERT are COVID 19-Responsive Behaviour, in collaboration with UNICEF, Action Research, Cyber Hygiene, etc. These courses are also rerun by the States and UTs in their respective DIKSHA tenant.

Support to Mauritius for Creation and Maintenance of Student Support Programme (SSP) Portal and Mobile App

The NCERT supported the Republic of Mauritius in creating a mobile app (Android) during the COVID-19 pandemic and delivery of e-contents through SSP mobile app. It was also continuously associated with the development and maintenance of the SSP portal (<https://ssp.moemu.org/>).





3. Major Publications

The NCERT publishes curricular materials including textbooks, workbooks, supplementary readers, teacher guides, laboratory manuals, source books on assessment, exemplar problems in mathematics, research reports/monographs and educational journals. Apart from non-textual material, 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. During the year, the Council brought out the publications — Bridge Course for Out-of-School Children; *Readiness Module and Practice Sheets (Level I-IV)*; Children’s Magazine *Firkee Bachchon Ki* (Children’s Magazine); *Prathmik Shikshak*; *The Primary Teacher*; *Shiksha me Samaveshan: Vidyalaya Prabandhan Samiti ke liye Sandarshika*; *Inclusion in Education: A Manual for School Management Committee*; *Educational Rights of Children with Special Needs: Frequently Asked Questions*; *Uttar-Purvi Bharat— Log, Itihas aur Sanskriti*; *Shumal Mashirui Hindustan: Awam, Tareeqh aur Tehzeeb*; *An Introduction to Indian Art – Part 2*; *Indian Educational Review*; *Bhartiya Adhunik Shiksha (BAS)*; *Journal of Indian Education (JIE)*; *Voices of Teachers and Teacher Educators (VTTE)* (Online Journal); Students’ Textbooks on Vocational Courses; *Guidelines, Modules and Videos for Pre-Vocational Education for Classes VI to VIII*; *Guidelines on On-the-Job Training for School Students*; *Guidelines and Brochure on Diploma in Vocational Education and Training (DVET)*; *Quarterly Bulletin on Vocational Education*, etc.

Exemplar Bridge Course Package for Out-of-School Children

A Bridge Course has been developed from Preschool to Class VIII for ‘Out-of-School Children’ studying in special training centres as per the provision of the RTE Act 2009.

The Right of Children to Free and Compulsory Education Act, 2009 provides free and compulsory education to all children from the age of six to fourteen years. Under RTE Act 2009, an Exemplar Bridge course has been developed for special training centre for out-of-school children. The Exemplar Bridge course Package is being developed in four levels. One ‘Handbook for Teachers’ is also being developed.

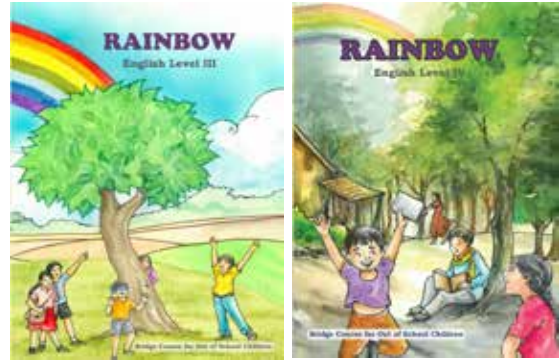
- ❑ LEVEL I— *Readiness Module and Practice Sheets — Navarambh, Part 1* (ISBN 978-93-5292-386-1) and *Navarambh, Part 2* (ISBN 978-93-5292-385-4)

This is a module which offers opportunities for hands-on activities for matching, sorting, classification, grouping, rhymes and songs, storytelling, educational games, dominoes, flashcards, language and maths activities, drawing and small project works. It provides joyful learning and is intended to provide help to children to adjust with the school schedule.



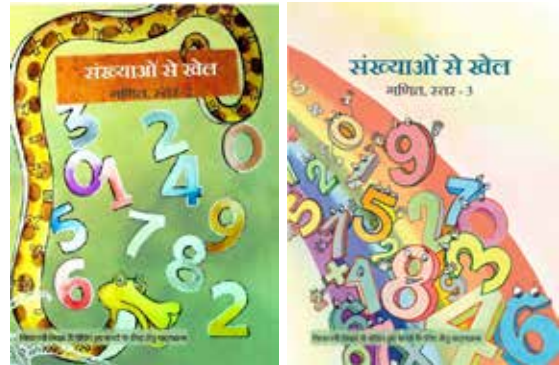
- LEVEL II — *Indradhanush*, Hindi, Level 2 (ISBN 978-93-5292-350-2), *Rainbow*, English, Level 2 (ISBN 978-93-5292-366-3) and *Sankhyaon Se Khel*, Maths, Level 2 (ISBN 978-93-5292-349-6)

The subjects covered in this level are English, Hindi and Mathematics. This level provides foundations of language learning and early mathematics as it is the first step on which subsequent learning is based. The module is aligned to the learning outcomes of Classes I and II.



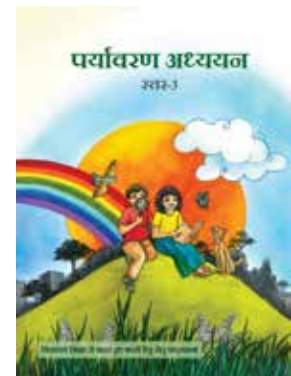
- LEVEL III — *Indradhanush*, Hindi, Level 3 (ISBN 978-93-5292-353-3), *Rainbow*, English, Level 3 (ISBN 978-93-5292-351-9), *Sankhyaon Se Khel*, Maths, Level 3, (ISBN 978-93-5292-352-6) and *Paryavaran Adhyayan, Environmental Studies*, Level 3 (ISBN No- 978-93-5292-354-0)

This level is aligned to the learning outcomes of Classes III to V. The subjects covered are English, Hindi, Mathematics and Environmental Studies.



- LEVEL IV — *Indradhanush*, Hindi, Level 4, (ISBN 978-93-5292-357-1), *Rainbow*, English, Level 4, (ISBN 978-93-5292-356-4), *Sankhyaon Se Khel*, Maths, Level 4 (ISBN 978-93-5292-355-7).

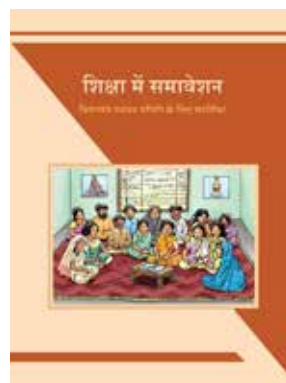
This level is aligned to the learning outcomes of Classes VI to VIII. The subjects covered are English, Hindi, Mathematics, Science and Social Science.



Shiksha me Samaveshan: Vidyalaya Prabandhan Samiti ke liye Sandarshika

(ISBN 978-93-5292-207-9)

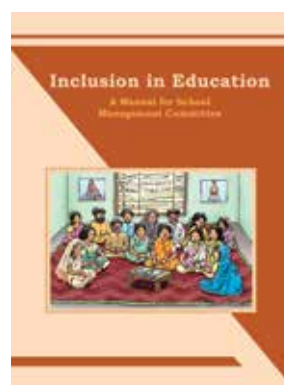
The Manual has been developed to create awareness on roles and responsibilities of SMC members. The Manual emphasises different issues and concerns related to quality education of children belonging to different marginalised groups. It has eight chapters viz., school management, school management committee, preschool education, education of children with disabilities, education of children belonging to socially disadvantaged groups, gender and girls' education, adolescent learners in school, and disaster, conflicts and schooling. The hard copy of the manual has been disseminated to educational institutions like SCERTs, SIEs, DIETs and DoEs of different States across the country and is also available on the website of NCERT.



Inclusion in Education: A Manual for School Management Committee

(ISBN 978-93-5292-365-6)

A manual titled *Inclusion in Education: Manual on School Management Committee* has been developed for School Management Committee (SMC) members to create awareness on the roles and responsibilities of SMC members and strengthen them to implement inclusion in education in schools. The first chapter is on School Education, describing the nature of inclusive school, the concept of management and school management, the rights of children to education and the basic role of school management committee members. The second chapter on School Management focuses on composition and constitution of SMC, specific roles and responsibilities of SMCs and grievance redressal mechanism. The third chapter highlights upon inclusion of disadvantaged children in preschool education, its significance, ECCE policy and the specific role of SMCs for making preschool education inclusive in nature. The fourth chapter stresses upon education of children with different disabilities. It describes the nature of different disabilities, specific characteristics, supportive services and responsibilities of members of school management committee for the inclusion of CwDs in school. Towards providing quality education to children belonging to disadvantaged groups, the roles of SMCs have been described in the fifth chapter. In the sixth chapter, the issues of gender concerns and education of girls have been raised. It also highlights the responsibilities of SMC towards the education of girls and transgender children. The role of SMCs is important for taking care of adolescent learners in school. They must be aware of the physical, psychological, emotional and behavioural changes among adolescents. These issues and roles of SMC have been covered in the seventh chapter. Chapter eight emphasises the roles and responsibilities of SMC during disaster and social conflicts, and smooth functioning of the school in such situations. The Manual has been disseminated to educational institutions like SCERTs,

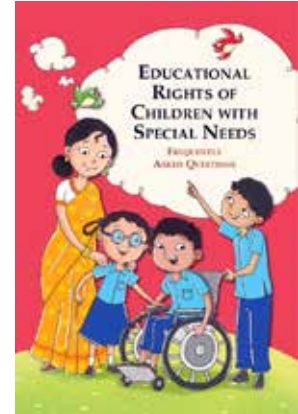


SIEs, DIETs and DoEs of different States across the country and is also available on the NCERT website.

Educational Rights of Children with Special Needs: Frequently Asked Questions

(ISBN 978-93-5292-392-2)

The booklet titled *Educational Rights of Children with Special Needs — Frequently Asked Questions* has been developed to demystify and de-jargonise the Right to Education (Act), 2009, as a legal document with a focus on Children with Special Needs and those belonging to disadvantaged groups and weaker sections of society. It is a comprehensive booklet that covers all major aspects of the RTE Act including relevant sections and clauses, amendments, rules, guidelines and norms. It is divided into eight chapters that follow the thematic sequence of the Act. It is meant to be used by teachers, educational administrators, parents, teacher-educators, students and all others working towards promoting children's Right to Education (RTE). The preparation of this FAQ booklet on the RTE Act, 2009, has been guided by an Advisory Committee and a team of experts.



An Introduction to Indian Art — Part 2

(ISBN 978-93-5292-337-3)

This is a textbook for students of Class XII, who have opted Visual or Fine Arts as an optional subject across different boards. There are eight chapters in the textbook, mainly covering the tradition of paintings during the medieval and modern periods of India, spanning almost 1000 years. The chapters highlight the manuscript traditions of paintings before paper was introduced, different schools of miniature painting tradition of Rajasthan, Mughal and Deccani schools, amalgamation of different styles from western and central Asia coming to Indian traditions and techniques, the *Pahari* or Schools, the Bengal School and cultural nationalism in India, the modern trends in art and at last, examples of regional arts as living traditions practiced by people and the community. In all the chapters, the stylistic features of the painting traditions and their techniques have been explained with examples of paintings from museums and collections spread all over the world. The textbook is QR code embedded, having many other resources and has more than 100 colour plates with description. The textbook has been translated into Hindi and Urdu, which are under publication.

Conclave on School Education in the 21st Century under NEP 2020

(ISBN 978-93-5292-363-2)

Ministry of Education, Government of India organised the *Shikshak Parv* event from 5 to 25 September 2020. The aim of the event was to conduct in-depth deliberations on NEP 2020, create awareness and ensure its proper and timely implementation. The event included daily sessions on a variety of themes and a two-day *Conclave on School Education in the 21st Century*. Two reports in both digital and print forms have been prepared to give a concise record of the proceedings of the events. The overall coordination of *Shikshak Parv* was done



by NCERT. The Conclave was graced by hon'ble Prime Minister Narendra Modi and other dignitaries. He shared his views on the NEP 2020 and motivated all stakeholders to work together for the children, as according to him, the “work has just begun!”. During the Conclave, the Secretary of School Education and Literacy also shared the Implementation Plan of NEP 2020, which clearly outlined the tasks, organisations, timelines and process of management. The technical sessions held during the Conclave were organised on the major themes of NEP 2020, and had a combination of experts and practitioners, including teachers, principals and National Awardees, sharing their insights.

NCERT's Sessions during Shikshak Parv 2020

(ISBN 978-93-5292-360-1)

As part of the *Parv*, academic sessions from NCERT faculty on various themes related to NEP 2020 were conducted by the faculty members of NCERT. These themes included: *Use of Technology, Inclusion and Equity, Vocational Education, Teachers and Faculty Development, Competency Based Education and Learning Outcomes, Foundational Literacy and Numeracy, Examination and Assessment Reforms, Curriculum Reforms and National Curriculum Framework (NCF) and Pedagogy, Effective Governance and Standard Setting and Quality ECCE and Good Nutrition: Right of Every Child*. Each session had two to three experts and one practitioner, deliberating and sharing experiences on the themes. The sessions generally ended with a short question answer session. This format provided the viewers with an opportunity to understand the numerous aspects of NEP 2020 thoroughly. The *Shikshak Parv* had a phenomenal viewership on different digital platforms, such as *Kishore Manch App, YouTube, Twitter, Facebook*, and different DTH service providers. Most significantly, MyGov portal saw an overwhelming response from viewers. The presentations, background notes and infographics shared during the event have been uploaded on the MoE website.

Students' Textbooks on Vocational Courses

The institute has been entrusted with the major task of development of students' textbooks and teachers' handbooks for job roles in various sectors under NSQF approved by the Project Approval Board (PAB), and *Samagra Shiksha*, under the Ministry of Education (MoE), Government of India for the year 2020–21.

During the year 2020–21, the institute published 152 Vocational Curriculum for two years as per the job roles and 40 Student Textbooks in 19 sectors (Agriculture; Apparel, Made-ups and Home Furnishing; Automotive, Beauty and Wellness; Banking, Financial Services and Insurance; Construction; Electronics; Food Processing; Health Care; IT-ITeS; Retail; Physical Education and Sports; Plumbing; Power; Private Security; Telecommunication; Tourism and Hospitality; Transportation, Logistics and Warehousing; and Media and Entertainment). The textbooks have also been uploaded on e-Pathshala and websites of NCERT and PSSCIVE (www.psscive.ac.in).



JOURNALS AND MAGAZINES

Firkee Bachchon Ki

This is a children’s magazine for learners especially of Class I and II. It targets readers in the age group of 5–8 years. It is different from a storybook or a book on rhymes because it caters to different genres and provides children with rich and varied language experiences. Magazine has a very wide canvas enfolding stories, poems, drama and humour. It is a bilingual magazine which includes works in English and Hindi. It is developed with the purpose to promote reading and writing skills in early years of childhood. It is published twice in a year. This magazine caters to the needs of children by providing them with relevant, interesting reading material in Hindi and English. The magazine also includes the poems, stories and pictures developed by the students of different parts of India. This would help motivate the children in developing close association with the content. Illustrations hold an important place as they provide support in reading and understanding the text. It makes it possible for children to predict and make guesses in the process of meaning making. These are useful for enhancing the foundational literacy skills of young learners.



Prathmik Shikshak

(ISSN 0970-9312)

It is a quarterly journal in Hindi published by NCERT for providing a forum to teachers, teacher–educators, policy planners and administrators to share their experiences and innovations and also to discuss contemporary issues in the Primary Stage of Education. The January 2021 issue (Volume 45, No.1) has been published.

The Primary Teacher

(ISSN 0970-9282)

It is a quarterly journal in English, published by NCERT for providing a forum for teachers, teacher–educators, policy planners, administrators and scholars to share their experiences and innovations and also to discuss contemporary issues at the Primary Stage of Education. The October 2016 issue (Vol. XLI, No.4) has been published.

School Science

(ISSN 0036-679X)

A quarterly journal, *School Science*, is published by the NCERT which gives platform for publishing articles, innovations and experiences in teaching learning of science and mathematics education. The Resource Centre for Science and Mathematics Education (RCSME) of the Department of Education in Science and Mathematics collects and disseminates the information on all aspects of science, mathematics and environment education. The December 2015 (Volume 53, No.4) has been published. A special issue on “COVID-19 and the Environment” is being published for 2020–21.



Indian Educational Review

(ISSN 0019-4700)

The *Indian Educational Review* (IER), a peer reviewed 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 interdisciplinary perspectives. The journal is published half-yearly in January and July. The January 2020 issue (Volume 58, No.1) has been published. Some initiatives have been taken to make the journal more useful which include publicising the priority areas of research under ERIC from time-to-time, and summaries of the completed ERIC funded researches.

Since January 2018, each issue of IER carries a survey of research on a theme. The IER January 2018 issue carried a survey on 'Research Trends in Environmental Education', July 2018 issue published a survey on Research in Education of Children with Disabilities, January 2019 on Research in Social Science Education, July 2019 on Research in Teaching of English Language, January 2020 on Research in Science Education, and July 2020 on Research in Elementary Education. The abstracts of the research papers are also being published in Hindi.

Bhartiya Adhunik Shiksha

(ISSN 0972-5636)

The quarterly journal *Bhartiya Adhunik Shiksha* is an important publication in the field of education, which finds place in the UGC-CARE List. This journal is useful for dissemination of ideas, innovations, experiences, best practices and research findings for teachers, teacher–educators, researchers and other concerned with school and teacher education. The content of journal includes thought provoking articles, research papers, challenging discussions, book reviews, interviews and other features. The October 2020 issue (Volume 41, No.2) issue has been published and is available on the NCERT website.

Journal of Indian Education

(ISSN 0377-0435)

Journal of Indian Education, a UGC-CARE List journal, provides a forum for teachers, teacher–educators, researchers and other concerned with education to encourage original and critical thinking in education through presentation of new ideas, critical appraisal of contemporary educational problems and experiences on innovative practices. The content of the journal includes thought provoking articles, research papers, challenging discussions, innovative practices, book reviews, interviews, and so on. In 2020–21, August 2020 issue (Volume XLVI, No.2) has been published and is available on the NCERT website.

Voices of Teachers and Teacher Educators (VTTE)

The VTTE is a biannual online journal which is published by the NCERT and is listed in the UGC-CARE List. The journal has proved to be a useful publication for dissemination of ideas for teachers, teacher–educators, researchers, students and other stakeholders from school education and teacher education. The contents include thought provoking articles, research papers, critical reviews, best practices, innovations and experiments, field experience and book reviews and other features. During the year 2020–21, two issues of this journal (i.e., July 2020 and December 2020) were finalised and uploaded on the NCERT website.



Indian Journal of Educational Technology

(ISSN 2581-8325)

In order to facilitate sharing of new research and facilitate academic discussions in the field of Educational Technology (ET) and ICT, the *Indian Journal of Educational Technology* (IJET) is published by the CIET. The January 2021 issue has been uploaded on the CIET website.

Online Publication of Newsletters by CIET

All the four issues of CIET's online newsletter have been uploaded on CIET website.

Educational Trends

Educational Trends, a biannual journal of RIE, Ajmer, is being 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 the States and UTs departments of the region to participate, share and publish research work. Two volumes as special issue of the Journal comprising of papers on the conference on Learning Outcomes organised by RIE, Ajmer, on 7–9 March, 2018, have been edited and finalised for publication.

Annual Report 2019–20

The journey of NCERT, the apex organisation in school education, for the year 2019–20 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.





4. Research Studies

Research being one of its principal functions, NCERT undertakes, promotes and coordinates educational research on various aspects of school education and teacher education. On the basis of insights gleaned through the research studies and innovations carried out, NCERT plays a pivotal role in forming policies and programmes to bring about desirable changes in the educational system.

In the area of educational research, during the year, the Council conducted studies in different areas of school education and teacher education viz., 'A Study of Awareness and Implementation of Continuous and Comprehensive Evaluation (CCE) in light of the RTE Act, 2009 at the Elementary Stage'; 'Review of Current Textbooks at the Primary Stage'; 'Review of NCERT Curriculum Syllabi and Textbooks in Hindi, English, Urdu and Sanskrit languages for School Education'; 'Educational Research Survey: Gender Concerns in School Education in India'; 'Status of Girls' Hostel Scheme: An Exploratory Study Focusing on Scheduled Caste (SC) Girls at Secondary Stage'; 'Participation and Performance of Girls in National Talent Search Scheme (NTSS): A Spatial-temporal Study from the Viewpoint of Gender Gap Analysis'; 'Case Study of Learning Environment in Primary Schools'; 'Practicing Art Integrated Learning'; 'Enriching Teacher Education Institutions (DIETs) for Promoting Sustainable Development: A Pilot Project'; 'A Study of Learning Resources including Simple Explicit Animation (SEA) Approach in Understanding the Concepts of Chemistry and Reaction Mechanism in Chemistry at the Senior Secondary Level'; 'Augmented Reality (AR) based Mathematics Lab Activities as a Sustainable Supplement to Traditional at the Secondary Stage'; 'Learning Outcomes of Children with Learning Disabilities: Exploring the Determinants in Inclusive Classroom'; 'Evaluation of Effective Implementation of D.El.Ed. Programme in Andhra Pradesh'; 'Implementing Interventions at Elementary School Stage: A Block Level Research Project'; 'Impact Study on English Language Training Programme (ELTP) of Karnataka State'; 'Textbook Analysis at the Elementary Stage of Education in Manipur'; 'A Study on the Perception of Educational Stakeholders on Mother Tongue Education in Mizoram', etc.

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 work on their disciplines directly related to education. In 2020-21, the NCERT has awarded Doctoral Fellowships to ten candidates.

DEPARTMENT OF ELEMENTARY EDUCATION

A Study on Awareness and Implementation of Continuous and Comprehensive Evaluation (CCE) in light of the RTE Act, 2009, at the Elementary Stage

The NCERT developed common guidelines on CCE and carried out dissemination and orientation of the States to implement them in schools across the country. In order to understand the gap between theory and practice of CCE, this study was taken up in the Demonstration Multipurpose (DM) Schools across all RIEs (Bhopal, Ajmer, Bhubaneswar, Mysuru) and one school at Ichhawar block, Bhopal. The objectives of this research were to study the effectiveness of CCE being implemented in these schools in terms of feasibility of available time, resources, classroom and school environment, teachers' performance (teaching and learning, assessment and follow-up of students' learning and progress), students' engagement and performance in different curricular areas, to study the worth (in terms of child's learning and progress and feasibility of available time, resources, classroom and school environment) of CCE in the opinion of different stakeholders (principal, teachers, parents/guardians, students) and to assess the strengths and challenges of CCE for its replication on a macro scale. The research tools viz., Classroom Observation Schedule, Interview Guide for Teachers and Principals, Focus Group Discussion Guide for Students and Parents and School Observation Proforma were used for the study.

The findings suggest that all DM schools were well-equipped in terms of infrastructure. There was negligible scope for 'assessment for learning' and 'assessment as learning'. The schools lacked alternative strategies for learning and assessment, criteria for mapping the learning with no marked difference between formative and summative assessments. Children were simply labeled with grades, and report cards did not have scope for any qualitative feedback.

The study concludes with suggestions that the multi-grade situation may not be a substitute for the mono-grade system. There is a need of bringing an attitudinal change among teachers, apart from orienting them on learning outcomes, lesson and unit planning under constructivist paradigm, integration of Environmental Education, Art Education and Health and Physical Education at different levels and decentralisation in planning of curriculum planning, for example, yearly calendars, timetable, etc., by the teachers. The research report has been uploaded on the website of NCERT and also shared with RIEs and different stakeholders.

Review of Current Textbooks at the Primary Stage

The study focused on the review of the current NCERT textbooks at the primary level in light of the *National Education Policy 2020*. It has been one-and-a-half decade since the curricular material based on NCF 2005 has been in use. Various studies and literature indicated the need to revisit/revise the textbooks for the issues or challenges faced by teachers and students and in light of emerging contemporary concerns. Further, with the roll out of NEP 2020, the curricula and textbooks of different subjects at various stages need a fresh review exercise.



DEPARTMENT OF EDUCATION IN LANGUAGES

Review of NCERT Curriculum, Syllabi and Textbooks in Hindi, English, Urdu and Sanskrit Languages for School Education

Language curriculum, the language syllabi of the *National Curriculum Framework* (NCF) 2005 and language textbooks developed as a follow up to it in the languages — Hindi, English, Sanskrit and Urdu, have been reviewed from the view of authenticity of texts, tasks, proposed pedagogy, assessment provision in the books and in light of the ideas and recommendations of the *National Education Policy 2020*. Tools developed in consultation with experts were used to analyse the books along with the feedback received from various users and stakeholders of school education, parents and learners themselves. The textbooks have been in use for about 15 years. The findings of the analysis reveal that: (i) the textbooks have been developed based on sound pedagogical understanding of language learning, social and cultural ethos of the country; (ii) the textbooks have been in use for about 15 years and are being used by more than 10 States for different stages of schooling (some States use them from primary to senior secondary stage, while some use the books for a particular stage of schooling, for example, upper primary, secondary or senior secondary stage); (iii) selection of texts and narratives are of pan India nature and attempt to bring in texts from Indian languages and cultures; (iv) the textbooks embed pedagogy and philosophy of NCF 2005 and constructivism as an overarching philosophy is reflected in the themes, tasks and processes; (v) the textbooks attempt to inform the teachers about the pedagogy and ideals of NCF 2005 and guide the learners through rubrics; (vi) attempts have been made to guide teachers on the assessment of language learning. Language-in-education policy and the advocated pedagogy of *National Education Policy 2020* call for a curriculum revision and material (textbooks and other material) need to provide scope for bringing in local elements addressing the diversity of varied nature in our contexts.

DEPARTMENT OF GENDER STUDIES

Educational Research Survey: Gender Concerns in School Education in India

The project was undertaken to identify the broad themes and trends of research conducted during the period 2001–2020 in the area of ‘Gender Concerns in School Education in India’. A systematic review of the research studies was carried out and a report has been prepared, which consists of five broad themes viz., Access to Education, Gender and Marginalisation in Education, Gender and School Curriculum, Socialisation of Gender in Schools, and Policy making and Implementation for Women’s Education. Each theme is further divided into sub-themes that demonstrate the diversity of researches done to understand gender and education. It presents certain trends that could be identified in the body of literature, making way to look at gaps in the existing research and a critical discussion around the same. The material or resources for the review



were collected from the researches conducted, articles published, Ph.D. or M.Phil dissertations and institutional research reports, books and documents during the period 2001–2020.

Status of Girls' Hostel Scheme: An Exploratory Study focusing on Scheduled Caste (SC) Girls at the Secondary Stage

The objectives of the study were to examine the infrastructural facilities of the KGBV hostel; role of the scheme in enhancing the enrolment and retention of SC girls in the catchment areas; perception of parents and students regarding the hostel facilities and other issues related to SC girls. The study was conducted in three states viz., Gujarat, Assam and Telangana. The three districts of Gujarat—Rajoda, Bhojwa and Patdi; two districts of Assam— Goalpara and Morigaon; two districts of Telangana— Sangareddy and Narayanpet were selected for the study. The data were collected from the State officials, wardens, students and their parents.

The study reveals that the scheme has helped in enhancing the enrolment and retention of girls from the SC community. The girls did not experience any caste-based alienation during the stay. The parents and girls were satisfied with the facilities being provided in the hostel. The girls actively took part in all hostel activities and committees, and hence, did not experience any form of alienation or bullying. All parents across the States said that the academic performance of their daughters had improved after enrolment in the hostels. The hostel wardens stated that the enrolment of students had increased over the years. Interaction with the girls and parents revealed that most of the schools were situated far away from their homes, and safety and security of the girls while commuting have been a constant area of concern for the parents. This often resulted in the girls not continuing their education at the secondary stage. Since the hostel scheme provided food and lodging facilities to the girls, the parents were comfortable keeping their daughters away from home in secure hands and this in turn has been successful in checking the dropout rates of girls in that area.

However, the need for trained female security guards for the safety and security purposes was expressed by the wardens and parents. They also expressed the need for facilities like sports, library, coaching and recreational activities in the hostels. Additionally, some hostels lacked CCTV surveillance camera. The girls and the parents also iterated the need for vocational training in the hostels. Based on the interactions of the students, parents, wardens and other stakeholders, the study provided State-wise recommendations, which will help in better functioning of the hostel scheme.

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

The research project was conducted with the objectives to analyse the trend of participation and performance of girls in the Scheme, identify the causes of gender gap and gender stereotyping, explore the impact of socio-economic background and nature of inputs in the success of awardees and suggest strategies to improve the participation and performance of girls. The study explored gender gap through gender-wise trend analysis on the basis of secondary data for all 36 States and UTs for three years (2016–18).



To identify the causes of gender gap, five States viz., Rajasthan, Maharashtra, Uttar Pradesh, Madhya Pradesh and Meghalaya were taken as samples and field visits were conducted based on the performance of girls. The girls who succeeded as National Talent Search Exam (NTSE) awardees and those who narrowly missed in NTSE were interviewed. Tools of the study included questionnaire for students and their parents. Data were mostly collected through questionnaire-cum-interview method. The study findings showed that the different question types in board and competitive examination viz., NTSE; was a contributing factor towards low performance of students. The school teaching is not suitable for preparing students for succeeding in competitive examination. The girl students are guided to focus on board examinations rather than on NTSE. In case of social science, the syllabus is quite different in the State boards in comparison with boards at the national level like CBSE. Hence, for Level I, students have to prepare from the state syllabus, while for Level II, they have to prepare according to the syllabus at the national level. Majority of the girls were of the opinion that awareness among parents and society, providing encouragement and equal opportunity to girls will go a long way to break gender stereotypes.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

A Status Study of Buniyadi Schools at Champaran, Bihar

Mahatma Gandhi was keenly interested in strengthening the edifice of education that was rooted in the child's lived context. His vision of *Buniyadi Shiksha* was to bring the child close to the environment, roots and promote knowledge in mother tongue. This focus would help in developing self-esteem among the learners and relate concepts of disciplinary knowledge with their lives. This form of experiential learning would instil among the learners love for acquisition of knowledge and strengthen learning by doing. The curriculum for life, according to Gandhiji, depended upon in-depth knowledge of the surroundings and encourage among the beneficiaries creativity and learning how to learn. The report of the present study undertaken is based on primary and secondary sources.

Evaluation of Social Science Textbooks

As a follow-up to NEP 2020, the department undertook the evaluation of social science textbooks with an objective to examine the curriculum load, linkage within the subjects and continuity from upper primary to higher secondary stages, inclusiveness, ICT integration, recent developments and learning outcomes for smooth transition of learners. The questionnaire based on these dimensions was administered on practising teachers and subject experts. The study will be helpful in designing the new syllabi and textbooks as per the NEP 2020. The responses were obtained either through e-mail or personal interaction. The findings of the study were as follows.

- ❑ The language in social science textbooks is simple, comprehensive and easy to understand.
- ❑ A variety of hands-on activities, cartoons and storyboards have been adequately incorporated.



- ❑ The thematic approach in history textbooks leads to conceptual understanding of events and processes.
- ❑ Learning economics through e-content, MOOCs and other enrichment material, such as dictionaries, handbooks and integrated modules should be further promoted for effective transaction.
- ❑ Suggestions received time-to-time of political and argumentative nature have to be reviewed for all political science textbooks by an authorised academic committee as piecemeal changes may not be suitable.
- ❑ Geospatial skills to be introduced through School Bhuvan-NCERT portal.
- ❑ The textbooks adequately incorporate gender, CWSN and other national core concerns.
- ❑ Sociology textbooks enable the learner towards self-reflection and understand the importance of social demography.
- ❑ Setting up of commerce lab, and conducting field and industrial visits have been suggested for commerce curriculum.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Evaluation of Textbooks in Science and Mathematics at Upper Primary, Secondary and Higher Secondary Stage

The study was conducted for the evaluation of NCERT textbooks in science for Classes VI to X; in biology, chemistry and physics for Classes XI to XII and in mathematics for Classes VI to XII. These textbooks were developed nearly 15 years back based on *National Curriculum Framework (NCF) 2005*. The aim of the study was to make available a research based feedback on these textbooks, which would provide insights for the development of future syllabi and textbooks.

The data were collected through questionnaires from faculty members of the National Institute of Education (NIE) and the Regional Institutes of Education (and the Post Graduate Teachers (PGTs) and Trained Graduate Teachers (TGTs) of Demonstration Multipurpose Schools (DMS) of RIEs. The study has provided meaningful insights for improvement of each textbook regarding its physical aspect, chapter wise content, assessment, relevance with NEP 2020 and infusion of social concerns.

Review of Mathematics Syllabi at the Primary, Upper Primary, Secondary and Higher Secondary Stage

The objectives of the study were to study the existing syllabi in Mathematics at the stage of school education, enlist the advancements in subject areas that are required to be included in mathematics syllabi at different stages of school education and analyse the mathematics syllabi being undertaken internationally for drawing comparison.

Some of the observations found in the study are mass, capacity, speed, time zone, calculating distance and problem solving stragglers are widely discussed in other countries' syllabus at the primary level. Some countries introduce basic coding skills at early stage with a focus on solving elementary stage mathematical problems using computers.

Concepts of functions and their properties, such as slope, intercepts, etc., are covered in middle school. Rotational and translational symmetries are



also covered along with reflection symmetry. Concepts of random sampling, data handling and profanity models are introduced in an extensive manner. Concepts of simultaneous linear equation and their solutions are introduced in middle school. Mathematics modeling and data collection organisational skills are widely used. Proportion of probability is more extensive in international syllabi as compared to NCERT

A Study on Efficacy of Games, Toys and Fun Activities in Teaching-learning of Science at the Upper Primary Stage

The study aimed at investigating the efficacy of games, toys and fun activities (developed in the form of a handbook) on conceptual understanding of science concepts and how it affects learners at the Upper Primary Stage.

The study was designed as an experiment with single group pre- and post-test method. The study was conducted online due to COVID-19 pandemic on 'Mohalla Classes' with 21 teachers and 116 students from 21 schools of Icchawar Block, Bhopal, Madhya Pradesh and two Children with Special Needs from Delhi.

Administration of nine tools was done after online orientation of teachers on how to use *Handbook on Understanding Science through Activities, Games and Toys at the Upper Primary Stage*.

On concluding the findings, it can be said that the developed games, toys and fun activities had put a significant effect on conceptual development, enhancing interest towards science among students including CWSN at the Upper Primary Stage.

A Study to assess the Learning Outcomes of Students in Mathematics at the Upper Primary Stage in the North Eastern States

The objectives of the study were to assess the learning outcomes of students in mathematics at the upper primary stage, measure the achievement of students in terms of learning outcomes and identify whether the students have achieved the learning outcomes.

The study was quantitative and qualitative in nature, where tools were designed on the basis of the document 'Learning Outcomes'. In the process, four tools were designed, namely Teacher Interview, Achievement Test, Classroom Observation and Students Questionnaire.

The major findings of the study were as follows.

- ❑ Around two-third of the teachers interviewed were of the opinion that the learning outcomes help direct students learn in their mathematics classroom and almost all teachers felt that the learning outcomes defined at the upper primary level prove to be appropriate benchmarks for assessment.
- ❑ Almost all teachers believed that the learning outcomes are impacted by methodologies used to develop competencies and they also provide a scope for developing concepts through twenty-first century skills, such as visualisation, digitalisation and innovation.
- ❑ Majority of the teachers felt that the learning outcomes provide guidance for the holistic development of a child, empower teachers professionally, provide scope for developing concepts through twenty-first century skills, help create interconnected learning ecosystem, etc. However, some of the teachers believed that the defined learning outcomes restrict freedom for



individual teachers to design mathematics classes suited to the needs and interests of the students.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

Case Study on Learning Environment in Primary Schools and practising Art Integrated Learning

Art Integrated learning (AIL) is an approach rooted in the concepts of constructivist theory of learning, where each learner will go through an experiential process of learning using arts as a medium. The case study of learning environment is a qualitative research with the objective to examine the overall learning environment of schools where art integrated learning is being practiced. The study was conducted in 11 schools from six States namely, Delhi, Haryana, Maharashtra, Kerala, Bihar and Madhya Pradesh. The researchers conducted interviews with teachers, school principals, students and community members, and observed morning assembly, classroom teaching-learning process and overall school activities and environment. Focus group discussions were conducted with teachers and school heads. School profile related to the school records, reports of school activities and academic achievements were also used for the study. The study reveals that the heads of School, who were oriented on AIL pedagogy, were able to implement the AIL approach effectively and performed significantly better than other schools. This clearly indicates the need of adequate training to all teachers and the heads of the schools in AIL for creating a joyful and experiential learning environment in schools. The study also proves that AIL, as teaching strategies, can co-function significantly better with other quality interventions. The study further proves that AIL in rural or urban, government or private, single grade or multi-grade classrooms or schools has the same effect on learning environment.

DIVISION OF EDUCATIONAL RESEARCH

Research Reports completed under ERIC

The following ERIC projects were completed and reports were received.

S.No.	Principal Investigator (PI)	Title of the Project
1.	Sarat Kumar Rout Ravenshaw University, Cuttack, Odisha	Functioning of SMDC in Planning, Management and Supervision of Secondary School Activities in Tribal Areas of Odisha under RMSA— Primary to Senior Secondary Education
2.	Harpreet Kaur <i>Principal</i> , Sri Guru Harkrishan Model School, Chandigarh	Study on existing Pedagogical Practice, Issues and Challenges of Inclusive Education in Chandigarh
3.	Kirti Kapur, <i>Professor</i> , NCERT, New Delhi	A Study on Language Across Curriculum Pedagogy on Students' Learning
4.	Lokanath Mishra Mizoram University, Aizawl, Mizoram	Development of a Framework of Pedagogical Content Knowledge on Arithmetic for Primary Teachers of Mizoram



5.	Sunu Mary Abraham Rajagiri College of Social Science, Kalamassery, Kochi, Kerala	A Concept Map Recommendation System for Student Learning and Evaluation
6.	T. Geetha Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu	Use of Assistive Technology to Enhance Literacy Skills in Children with Learning Difficulties
7.	Amina Parveen <i>Senior Assistant Professor,</i> Department of Education, University of Kashmir Hazratbal, Srinagar	Implementation of Inclusive Education in Kashmir Province of J&K State
8.	N. Vasuki <i>Professor,</i> Department of Education, School of Education Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu	Developing Multimedia Package of Local Folk Tales and its Impact on Functional English of Rural Children
9.	R. Meganathan <i>Assistant Professor,</i> Department of Education in Languages, NCERT, New Delhi	An In-depth Study on Implementation of English Language Curriculum at the Upper Primary Stage

Ongoing ERIC Research Projects

The following ERIC projects continued during the time period of the publication in this annual report.

S.No.	Principal Investigator (PI)	Title of the Research Project
1.	Jayashree S. Bhat Manipal University, Mangalore, Karnataka	Development of Phonological Processing Assessment Tool for Primary School Children
2.	Annie Thomas JSS Hospital Campus, Ramanuja Road, Mysore, Karnataka	Impact of Stress, Anxiety and Physical Activity on the Academic Performance of School Children
3.	Yogesh Kumar Arya BHU, Varanasi, Uttar Pradesh	Cultural and Psychological Factors in Education of <i>Kharwar Adivasi</i> Children
4.	Justin P. Jose Dharmagiri Jeevas Social Centre, District Kannur, Kerala	An Explanatory Study on Triadic Social Interactions within School Social Geography in Tribal Areas of Kerala



5.	Devika BITS – Pilani, Jhunjhunu, Rajasthan	Influence of English Teachers’ Efficacy, Competency and Motivation on their Instructional Strategy: A Study of Secondary School Teachers in Jhunjhunu, Rajasthan
6.	M. Y. Ganai, <i>Professor</i> , Department of Education, University of Kashmir, Jammu and Kashmir	A Study on Equity and Inclusion in Education of <i>Gujjars</i> and <i>Bakerwal</i> (Scheduled Tribes) of Kashmir Division
7.	Sambit Kumar Padhi Department of Education Guru Ghasidas Vishwavidyalaya, Bilaspur, Chhattisgarh	A Study on Information Communication Technology Integration in Jawahar Navodaya Vidyalayas of Chhattisgarh
8.	Veena K. D. School of Allied Health Sciences, Manipal University, Karnataka	Development of Phonological Assessment Tool in Kannada and Malayalam
9.	Rishabh Kumar Mishra Mahatama Gandhi Vishwavidyalaya, Maharashtra	Designing and Implementing a Pedagogic Setting for teaching Social Science based on <i>Nai Talim</i> : A Case Study of Anand Niketan School
10.	Narayanan Annalakshmi <i>Professor</i> , Department of Psychology, Bharathiar University, Coimbatore, Tamil Nadu	Developing a Standardised Intervention Programme for Teachers for mentoring Students At-Risk’
11.	Sneh Bansal <i>Head</i> , Department of Education, Chandigarh Group of College, Landran Mohali, Punjab	A Comparative Study of the Status of Awareness of the RPWD Act 2016 for Inclusive Education in Government and Private School of Chandigarh, Panchkula, Mohali
12.	Biswajit Behera <i>Assistant Professor</i> , Department of Education, School of Education Central University of Punjab, Bathinda, Punjab	A Case Study on Approach to Explore ‘Ownership’ of the Students in the Process of Constructivist Approach of Learning and Achievement in Secondary School Science
13.	Jubilee Padmanabhan <i>Assistant Professor</i> , Department of Education, Central University of Punjab, Bathinda, Punjab	Development of Alternative Assessment Strategies for Science in Constructivist Classroom at the Elementary Level and its Impact on Cognitive and Affective Outcomes
14.	P. S. Sreedevi <i>Assistant Professor</i> Department of Education Gandhigram Rural Institute (Deemed University), Gandhigram, Tamil Nadu	Developing Science Process Skills of Secondary Students through e-Content Package



15.	D. Suresh <i>Registrar and Secretary,</i> Mahatma Gandhi National Institute of Research and Social Action (MGNIRSA), Hyderabad, Telangana	Mangroves of Godavari and Krishna Estuarines — An Educational Manual (Development and Implementation on Rural School Students)
16.	Laxmikant Paikray Social Welfare Organisation for Rural Development (SWORD), Bhubaneswar, Odisha	Effectiveness of Vernacular Language Education on Primary Level in Tribal Districts in Odisha State
17.	K. Manimozhi <i>Professor,</i> Department of Resource Management, Avinashilingam Institute for Home Science and Higher Education for Women, Coimbatore, Tamil Nadu	Analysis of the Impact of inculcating Human Values among Rural Elementary School Children
18.	C. Thanavathi <i>Assistant Professor,</i> V.O.C. College of Education, Tuticorin, Tamil Nadu	A Study on the Effectiveness of Integration of Digital Media Technology in B.Ed. Teacher Education Curriculum
19.	Leela Rani <i>Associate Professor,</i> Department of Management, BITS – Pilani, Rajasthan	Developing Active Social Learning Interventions and Assessing their Impact on Environmentally Sustainable Consumption Behaviour of Primary Children
20.	D.C. Nanjunda <i>Associate Professor,</i> Centre for the Study of Social Exclusion and Inclusive Policy, Manasagangothri, University of Mysore, Mysuru, Karnataka	An Empirical Investigation of Status of <i>Ashram</i> Schools and its Impact on Education of ST Children in Karnataka State
21.	Ramesh M. <i>Assistant Professor,</i> Department of Education, Indira Gandhi National Tribal University, Amarkantaka, Anuppur, Madhya Pradesh	Exploration of Culturally Relevant Teaching to Develop Science Process Skills and Knowledge among Tribal School Students of Standard VI in the State of Madhya Pradesh
22.	Mansoor Rahman <i>Assistant Professor,</i> JSS College of Physiotherapy, M.G. Road, Mysuru, Karnataka	Adaptation of Indian Folk Games to increase Physical Activity and Academic Performance in School- going Children with Cerebral Palsy aged 5–18 years
23.	N. Dhanya <i>Assistant Professor</i> Department of Home Science (Child Development), St. Teresa's College, Ernakulam, Kerala	Development and Evaluation of a Structured Reading Programme (SRP) and training Teachers for improving the Reading Competency of Lower Primary Students



24.	Suma R. <i>Associate Professor,</i> JSS Institute of Speech and Hearing, M.G. Road, Mysuru, Karnataka	Effectiveness of Training Teachers of Regular Schools to execute Classroom Remedial Program for Children at Risk of Dyslexia
25.	Malavika Anakkathil Anil <i>Assistant Professor,</i> Department of Audiology and Speech Language Pathology, Kasturba Medical College, MAHE, Light House Hill Road, Hampankatta Mangaluru, Karnataka	A Cross Sectional Study of Story based Assessment of Cognitive Communicative Abilities in Preschool Children: A Developmental Profile
26.	Deepalaxmi Paresh Poojari <i>Assistant Professor,</i> Department of Physiotherapy Manipal College of Health Professions, Manipal Academy of Higher Education, Manipal, Karnataka	The Effectiveness of a Capacity Building Module on the Caregivers of Children with Cerebral Palsy through a Family Centred Approach on the Quality of Life and Family Empowerment
27.	M.K. Satapathy RIE, Bhubaneswar, Sachivalaya Marg, Bhubaneswar, Odisha	A Study on the School Teachers' Understanding of Climate Change Issues and Attitude towards, and Practices on Green Lifestyle
28.	P. Ponnusamy <i>Assistant Professor,</i> Gandhigram Rural Institute (Deemed to be University), Gandhigram, Tamil Nadu	Functional Efficiency of Selected Rural Upper Primary Government Schools in Dindigul District of Tamil Nadu
29.	Prabir Mukhopadhyay <i>Associate Professor,</i> PDPM-Indian Institute of Information Technology, Design and Manufacturing (IIITDM) Jabalpur, Madhya Pradesh	Ergonomic Intervention in the Classroom Environment for Enhanced Learning
30.	Vidhya M. <i>Assistant Professor,</i> JSS College of Nursing, Mysuru, Karnataka	Effectiveness of Planned Demonstration Programme with Video Assisted Teaching on Knowledge and Competency in Selected First-aid Measures among High School Students of Mysuru City with a View to develop an Information Booklet
31.	Divya Deepthimahanthi <i>Assistant Professor in Zoology,</i> St. Ann's Degree College for Women (Autonomous), Mehdipatnam, Hyderabad, Telangana	Development of Manual for Identification of Species in Mangrove Regions and its Implementation



32.	Kaushal Kumar Bhagat <i>Assistant Professor,</i> Centre for Educational Technology IIT–Kharagpur, West Bengal	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
33.	Sudha A. <i>Assistant Professor in Special Education, Ramakrishna Mission Vivekananda Educational and Research Institute, SRKV, Periyanaichenpalayam, Coimbatore, Tamil Nadu</i>	Problem Based Learning Method to teach Science Concepts among Tribal Children
34.	Reena Cheruvalath <i>Assistant Professor,</i> Department of Humanities and Social Sciences, Birla Institute of Technology and Science, Pliant, K.K. Birla Goa Campus, Goa	Evaluation as a Teaching Method: A New Pedagogical Model to improve Knowledge and Critical Thinking among Students

NCERT Doctoral Fellowship

For the year 2020–21, the advertisement for doctoral fellowship was given in daily newspapers and on the NCERT website, and mails were sent to organisations and university departments. The applications were received through online mode from NCERT website. In all, 135 applications have been received through the online mode. The internal screening of the application has also been completed.

NCERT Doctoral Fellowships 2020

The following research scholars were awarded fellowship during the year 2020.

S.No.	Name and address of the Doctoral Fellows	Title of the Thesis
1.	Kumar Ujwal University of Delhi	Psycho-social Influences on the Experiences and Responses to Intergroup Bias
2.	Aarti Singh Tezpur University	Study on Inclusive Education Component in Elementary Teacher Education Programme in Assam
3.	Paridhi Joshi IGNOU, New Delhi	Teacher’s 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 School 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 Amity University, Noida	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, Kerala	Development and validation of an Instructional Package based on <i>Bhagavad Gita</i> for Emotion Regulation among Secondary School Students

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

The NCERT Research Associateship (Educationists'/ Researchers' Pool) Scheme has been initiated to utilise the experience and understanding of young educationists or educational researchers, who have done their Ph.D. in the area of school education, but are still not in regular jobs. This will give the young researchers a chance to contribute and gain experience in their relevant areas of research 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 researchers. This scheme has been envisaged on lines of the Research Associateship (Scientists' Pool Scheme) of the CSIR.

The scheme is to select and engage some Research Associates to fulfill the above objectives. These Research Associates will be expected to undertake some projects in the Council, according to the Council's priorities, or undertake tasks as a faculty in the NCERT. Two candidates were selected under the scheme by the Selection Committee and they have joined.

DEPARTMENT OF TEACHER EDUCATION

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

DIET, Sehore (Madhya Pradesh), and DIET, Shahpura, Bhilwara (Rajasthan) have been adopted under the Block level research project. Intervention programmes were conducted with the objectives to support DIETs to enrich teacher education for promoting Sustainable Development Goals (SDGs). A two-day planning meeting with State and District functionaries from Ichchavar and Sehore blocks was conducted with the objectives to discuss the modalities for project implementation and identify the strengths, weaknesses threats and opportunities for academic interventions.

The data have been collected from DIET Sehore, which was analysed (SWOT Analysis) and the strengths, weaknesses, threats and opportunities have been identified for academic interventions in the DIET with reference to ESD.



On the basis of data analysis, discussions with experts and functionaries in DIETs, SCERT as well as District and State level officials, an action plan has been prepared for required interventions or enrichment of DIETs with respect to ESD. Poster competition on themes related to Sustainable Development for DIET students on Republic Day was organised, in which more than 100 students participated.

The activities included in the action plan for the year 2020–21 towards training, orientation and participation of student-teachers, teachers and other concerned stakeholders through different pedagogical approaches including methods that are associated with ESD were executed with help of DIET in Ichchavar Block. As per the action plan, three days' orientation programmes for teachers were organised for academic intervention for quality improvement at the elementary level in Ichchavar Block during the year at different centres in collaboration with DIET, Sehore, in which all teachers of Classes I to VIII from all 10 clusters of Ichchavar Block participated. A total of 549 teachers and 165 prospective teachers participated in these programmes, who were sensitised about education for sustainable development.

EDUCATIONAL SURVEY DIVISION

Major Activities conducted in 2020

School Based Assessment: A Pilot Study

The Educational Survey Division of NCERT conducted a pilot study regarding School Based Assessment (SBA) model in three States, namely Rajasthan, Gujarat, Kerala and in the Union Territory of Puducherry. Different techniques of assessment namely, peer assessment, feedback, self-assessment, rubric and portfolio assessment, and multiple choice questions were used. The pilot study intended to test the working of the aforementioned assessment techniques, field applicability, rationale and challenges that might occur at the ground level.

Each assessment technique was based on themes viz., Self Assessment (Direct and Inverse Proportion), Peer Assessment (Legislative Assembly Election), Portfolio Assessment (Force and Friction), Rubric Assessment (Motion) and Feedback Assessment (Gender).

The SBA model in the schools were implemented by a team of researchers from NCERT, who were trained by NCERT faculty through discussions, deliberations and modelling. The delivery of each lesson was followed by the assessment of the learners by collection of learners' responses in the form of worksheets and portfolios, etc., that were analysed and assessed in order to test the working of School Based Assessment.

The assessment rubric involved the classification of learners into four categories on the basis of their performance and achievement of Learning Outcomes. The categories of learners include: yet to be initiated on the learning outcome, learning outcome initiated but not achieved, learning outcome achieved and learning outcome achieved and who can help their peer group.

The analysis of results in Rajasthan shows that School Based Assessment (SBA) can be a useful strategy in the hands of the teacher in order to facilitate student learning in the best possible way. The tool was found to be useful, across all classes at the upper primary level, as the interaction between teachers and



students helped clarify the concepts in a better way. It was observed that the students responded well to the strategies of SBA. While executing the model, good participation and coordination of teachers and students was found.

In Kerala, it was observed that the teaching methods that were adopted during the try-outs turned out to be fruitful and the contextualisation of teaching made the learners articulate better. But the process, nonetheless, consumes more time than conventional, passive teaching exercise.

The study recommends that to overcome the challenge of language barrier, the medium of instruction in schools should be the State language. It will ensure better understanding of worksheet by the students and make them confident to participate. To overcome the challenge of conceptual clarity, the plan should be executed by the teachers only after providing appropriate training to them. The training should be done on-site. Also, the implementation should be supervised by peer group as well as experts, and the teachers need to be trained to involve the learners in the process of development of concepts, like clarifying the learning outcomes, rubrics for assessment, and preparing the audio-visual material, etc. This will help the learners develop competencies like confidence and leadership. The pilot model is to be scaled and SBA should be carried out at the national level.

Implementation of National Talent Search Scheme

The National Talent Search Scheme (NTSS) is a flagship programme of the NCERT. It is being conducted since 1963. The purpose of the scheme is to identify and nurture students selected through two-tier process every year. The NTSS helps talented students by providing financial assistance in the form of monthly scholarship and also conducts nurturance programmes for them. There is 15 per cent reservation for SC and 7.5 per cent reservation for ST candidates. Besides, there is 4.1 per cent reservation for Children with Special Needs, which cuts across caste categories. On the eve of the 55th Foundation Day of NCERT— 1 September 2019, the Honourable Minister of Education had announced to increase the number of scholarships from 1000 to 2000.

Amidst the time of COVID-19 pandemic, the prestigious National Talent Search Examination (NTSE) 2020 Stage-II was conducted across the country on 14 February 2021. The NTSE was conducted at 58 centres across 40 cities including Kavaratti, Port Blair, Srinagar, Gangtok, Kolkata, Chennai, etc. Altogether 7586 candidates appeared in NTSE for selection of 2000 talented students for the award of scholarships for pursuing higher education.

REGIONAL INSTITUTE OF EDUCATION, AJMER

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

For implementing need-based interventions at the block level and to see their effectiveness, the institute has conducted a research study in 167 schools of Hurda Block in Bhilwara District of Rajasthan in the year 2018–19, 2019–20 and 2020–21. The block has been selected on the basis of poor performance of the district in the National Achievement Survey 2017. For planning the interventions, the training needs of teachers and teacher-educators have been assessed through a need assessment tool developed on the basis of their



subject specific needs, and particularly, to improve the low performing areas of the district as reported in *NAS 2017*. The learning levels and development of competencies amongst the students of the block were tracked using test items based on Learning Outcomes (LOs) by baseline assessment survey organised on 29–30 March 2019. The results of baseline assessment survey have been assessed and analysed as per the needs of the study. The performance of students in attaining the learning outcomes were presented class-wise from low to high performing, and also at block, panchayat and school level. The interpreted results were also analysed and compared categorically with respect to rural, urban, gender and CwSN. The low performing learning outcomes have been shared with the block officials, Panchayat Elementary Education Officers (PEEOs), School Heads and all school teachers of the block.

On the basis of the assessed learning levels of students and teachers' need assessment data, the need-based interventions (training and on-site support) have been imparted using Art Integrated Learning (AIL) and School Based Assessment (SBA). For providing on-site support to the teachers and promoting peer learning, two teachers from each panchayat have been identified and trained as master trainers.

As a result of quality interventions, the classroom processes in the schools have changed. The learning outcomes of the students are being improved and on-site academic support of the faculty has helped in providing solution to the identified problems and difficulties. The rapport formed with different stakeholders like CBEO, PEEO, SMC or SDMC, teachers, parents, etc., of the schools has resulted in the improvement of academic and infrastructural environment of the schools. The community sensitisation programmes have helped in improving attendance and retention of students in schools. The sharing platform and teacher groups have provided teachers the opportunity to share their practices. Also, the findings of case studies on the interventions reflect the effectiveness of the interventions and are also guiding to plan the future interventions.

A Study of Learning Resources, including Simple Explicit Animation (SEA) Approach, in understanding the Concepts of Chemistry and Reaction Mechanism in Chemistry at the Senior Secondary Level

The purpose of this research was to find out the effectiveness of new dimensions of teaching methods focused on understanding the concepts of chemistry and reaction mechanism in chemistry at the senior secondary level. The interventions were done in the Hurda Block, and capacity building programmes were conducted for lectures at identified schools in the area of Reaction Mechanism and Stereochemistry. After the intervention, significant improvements have been seen in the performance of students.

Augmented Reality (AR) based Mathematics Lab Activities as a Sustainable Supplement to Traditional at the Secondary Stage

Augmented Reality (AR) is a kind of Virtual Reality (VR) technology that can be used to help students who have difficulties in imagining geometrical objects in three-dimensional (3D) view. Augmented Reality can be applied in mobile learning, which will improve the efficiency and effectiveness in the learning process. Students face difficulty in certain topics of mathematics,



for example, volume and geometry as they are unable to picturise objects in a three-dimensional way. The institute developed an AR app— ‘RIE, (NCERT) Ajmer Mathematics Application’, which provides a better mathematical solution in 3D for Classes IX and X students.

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

The objectives of this study were to find out the teaching–learning determinants of children with disabilities in inclusive setting; explore the existing pedagogical processes and classroom climate, leading to improving the learning outcomes of children with disabilities in inclusive setting at the primary level; explore the status of children with disabilities under the category of Under Representative Group (URG) in inclusive set-up; and suggest innovative strategies to fulfil the various needs of children with disabilities in inclusive schools. Using purposive sampling technique, a total of 20 students with learning disabilities were selected. Out of this, the ratio of male and female was 14:6. *Learning Disability Checklist* by National Center for Learning Disabilities and Diagnostic Test of Learning Disability (DTLD) was also used for this study. The test was standardised on a sample of 1050 children in the age group of 8–11 years. Learning Outcomes checklist was also used for the assessment of Learning Outcomes and understanding the various pedagogical processes. Responses were recorded manually. Teachers or special educators’ views were also collected. The present study reveals that the responses of children with learning disabilities towards different stimuli differ significantly against all activities as well as all stimulus modalities. However, in case of children with ID and LD groups; difference is found mainly during the self-help activities like activities during lunch time. Among children with Intellectual Disabilities, unique and no response in different situations were comparatively low when compared with ASD.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHOPAL

A Study of Learner Evaluation Practices in Elementary Schools of Goa and providing Interventions on Identified Gaps and Emerging Trends in Evaluation

The research was conducted with the objectives to study the learner evaluation practices prevailing in elementary schools of Goa; study the issues in evaluation practices at the schools; and provide interventions on emerging trends in evaluation in the schools. The study was conducted in 12 blocks of Goa covering 48 schools. Questionnaires for the principals and teachers were used for data collection. The study reveals that most of the teachers are managing teaching-learning process in their classrooms by lesson or unit plan and by creating learning situation or activities in collaboration with students. Almost all teachers are using ICT in the teaching-learning process. All schools share the progress of students with their parents regularly through PTMs.

Effectiveness of Training Programme on the use of Secondary Science Kits at the School Level

The research was conducted by RIE, Bhopal with the objective to study the effectiveness of Training Programme on the use of Science Kits at the Secondary



Level from 24 to 28 September 2020. The intervention was done using the developed package on practical skills using science kits. The study was conducted in Madhya Pradesh and Chhattisgarh among the science students of Class IX and X. The study findings showed that the teaching of practical skills using science kits is effective in enhancing students' achievement and helps in clear understanding of science concepts.

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

The National Council of Educational Research and Training (NCERT) decided to undertake an in-depth and longitudinal study in the year 2017, with a rural block as unit of the study, with the broad objectives to: implement various interventions brought out by the Council, for example, innovative practices, learning resources, educational kits, supplementary readers, training packages, research tools; and assess their impacts on the attainment of learning outcomes. For this purpose, the rural block, namely Ichhawar of Sehore district, Madhya Pradesh, was chosen; and Regional Institute of Education, Bhopal was designated as the nodal implementing agency. The project was launched in the academic session 2017–18 with base line assessment of students' learning levels in basic school subjects using National Achievement Survey (NAS) tools developed by NCERT. Based on the results of this survey, various interventions, including training of teachers, block level functionaries and school heads, were provided in the academic session 2018–19; and at the end of the session, a survey of learning level was made using the same NAS tools. During the year 2019–20, a comparative study was conducted to analyse the trend in the year 2017–18, 2018–19 and 2019–20. For this study, all elementary and secondary level children across 10 education clusters of Ichhawar block constituted the subjects of the study. The major findings, as derived from comparison of the results of the survey conducted in the academic session 2017–18 and achievement survey conducted in the academic session 2018–19, and the trend analysis in the year 2019–20 revealed a growth in the rate of learning achievement of both elementary and secondary level children in all basic school subjects in the year 2019–20 as compared to that of the years 2017–18 and 2018–19.

During the year 2020–21, the following activities were conducted in the Ichhawar block.

S.No.	Name of the Activity	Type	Date
1.	Refresher Programme for Elementary School Teachers on Art Integrated Learning (4 batches)	Training	08–12 September 2020
2.	Refresher Programme for Elementary School Teachers on use of Science Kits (3 batches)	Training	21–25 September 2020
3.	Refresher Programme for Elementary School Teachers on use of Mathematics Kits (3 batches)	Training	21–25 September 2020
4.	Refresher Programme for Primary School Teachers on Language Science and Mathematics (4 batches)	Training	01–15 October 2020



5.	Workshop on Analysis of Secondary and Senior Secondary Level Data and Report preparation	Workshop	04–08 November 2020
6.	Workshop on Analysis of elementary level Classes III to VIII Data and Report Preparation	Workshop	09–13 November 2020
7.	Refresher Programme for Senior Secondary School Science Teachers of Ichhawar	Training	05–09 October 2020
8.	Refresher Programme for Senior Secondary School Mathematics Teachers	Training	05–09 October 2020
9.	Refresher Programme for Senior Secondary School Social Science Teachers	Training	05–09 October 2020
10.	Refresher Programme for Senior Secondary School Language Teachers	Training	05–09 October 2020

Impact of Social Sciences Training Programme on Classroom Processes at the Secondary School Level in the State of Goa

The research was conducted with the objectives to assess the extent to which training programme on social science was conducted for secondary teachers of Goa to build the capacity of teachers' in terms of awareness about ICT and their effective integration and also if the constructivist approach to teaching has percolated to the classrooms. The study draws its data from two sets of respondents, i.e., teachers and students. Twenty-three teachers and teacher-educators who attended training programmes from schools and teacher education colleges in Goa were drawn through purposive random sampling. The second group of respondents for primary data includes groups of students randomly drawn from different classes from the nine schools under study. Along with this, classroom observation was also carried out. Data relating to school infrastructure, implementation of constructivist pedagogy and ICT integration in classroom process and its related issues and concerns were collected through different tools, such as interview schedules, focus group discussions, interviews, etc.

Despite the lack of infrastructure, many teachers managed to integrate ICT in classroom teaching-learning process. It was also observed that few teachers could not regularly integrate ICT components in teaching social science due to unavailability of supporting infrastructure in their schools. Even in schools, where some ICT components are available, teachers stated that it is inadequate in terms of quantity and quality. In many schools, only one computer is available, so effective integration is not possible.

Concurrent Evaluation of Art Integrated Learning Programme in Ichhawar Block of Madhya Pradesh

Evaluation of Art Integrated Learning (AIL) programme in Ichhawar Block of Madhya Pradesh was conducted with the objective to study the understanding of key stakeholders of school education about AIL as a pedagogical tool; the perception of teachers, principals and students about the implementation



of AIL as a pedagogical tool on different dimensions vis-a-vis, attendance, training of teachers, time management, art form, learner participation, joyful learning and inclusive education, discipline, subject, skill development, values, cooperation and support; identify bottleneck vis-a-vis suggestions for improving the implementation of the programme; and provide a framework for effective implementation of AIL pedagogy in the schools of Icchawar Block. Interview schedules and focus group discussions were used for data collection.

The study revealed that teachers mostly use games and toys for integrating art in their classrooms, teachers said that AIL helped connect different concepts with daily life and also helped improve communication skills and cooperation. The teachers were of the opinion that participation and enthusiasm of students in classroom has increased due to the use of AIL pedagogy. They find AIL beneficial as it has led to an increase in skill development and mental development. Innovative aspects of AIL viewed by teachers were related to the enhancement of creativity, use of self-learning materials and development of critical thinking. However, the teachers said that they require more training in preparing AIL resources, especially, in mathematics and languages. Headmasters also had a positive attitude towards AIL pedagogy and revealed that the use of AIL helped in the professional development of teachers.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Learning Resource Centre for In-service and Pre-service Teacher Education Programme

The programme is designed for the development of educational resource centre to provide hands-on experiential learning to in-service and pre-service teachers. The centre is also used for the learning activities of DM School students. Under the programme, three activities viz., development of Educational Resource Room, where 150 activities are placed for being used in teacher education and teacher training programmes; development of herbal garden, in which 200 medicinal plants are grown with their nomenclature plates; and a Theme Park, where nine theme-based models are installed in the open space for the DM School and RIE, Bhubaneswar, are being undertaken.

Diploma Programme in Science Education

The resource material comprising eight theory modules, one practical manual, one project guide, one programme guide and one contact programme guide have been developed for conducting two semester DPSE in blended mode. Each module consists of six units and carries two credit points. The total credit is 36 for Diploma Programme in Science Education, which is to be executed from the next academic year.

e-Resources for School Curriculum and Teacher Education Curriculum

During the year 2020–21, 550 e-Content programmes were produced, which include 400 programmes under PM eVidya for Classes V and IX and 150 programmes on different subjects for Odisha state government schools. Also, 51 live classes have been telecast from ICT Studio, RIE, Bhubaneswar. (SAHYOG-20, NISHTHA-06 and other Subject 25 for PM eVidya Channel through the online mode).



Institutional Repository of Regional Institute of Education, Bhubaneswar

Institutional Repository of Regional Institute of Education, Bhubaneswar, was started in 2019–20. It is an online archive for collecting, preserving and disseminating digital copies of the academic output of the institution. The main objectives of the repository are to promote wider access and visibility of research outputs of RIE, Bhubaneswar, and to preserve the publications of the institute digitally for long-term access. During the year 2020–21, around 450 documents were uploaded in the repository.

Exemplar Items in Language, Social Science, Science and Mathematics at the Secondary Level

The programme aimed at preparation of exemplar items in languages, social science, science and mathematics at the secondary stage. It was prepared for the use of students as well as classroom teachers at the secondary level. As per discussion in the workshops, MCQs with clear focus on Class IX and X and learning outcomes have been developed. More than 280 ‘Exemplar Items in English and Hindi languages, Social Science, Science and Mathematics’ have been developed.

Teaching Learning Materials on Spoken English for Teachers teaching in Early Primary Grades of Odisha

Teaching Learning Materials (TLMs) on spoken English for teachers teaching the early primary grades in Odisha have been developed. The materials are based on learning outcomes, English speaking, listening, reading and writing skills.

REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

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

The programme was conducted with the objectives to study the effective implementation of D.El.Ed. programme in the State; analyse the D.El.Ed. textbooks used in Andhra Pradesh; and moderate teacher–educators’ handbooks on foundation and pedagogy courses. The language used in all the textbooks is simple. Most of the chapters in different subjects are illustrated in an understandable way. Though attempts are made for using the correct semantics and structure in the construction of sentences, they are not sufficient to get the right meaning. Terminologies used in the books are appropriate to the level of the students but with regard to the pedagogy subjects, specific terms need to be used in the textbook. Grammatical errors and spelling mistakes are noticed in every book. The overall approach to organise the text and content coverage is average. The scope for creating activities and assessment is in-built in the textbooks. Self-reflection exercises are provided but there is a scope for enhancing them.

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

The research project was undertaken with the objective to conduct a status study of the block and sub-block level functionaries in order to understand their effective functioning; 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; study the extent to which the ideas propagated by NCF 2005 (e.g., gender concerns, inclusive education, art integrated education, multilingualism, use of ICT, CCE, child-centred as well as subject-specific pedagogies, school library facilities, guidance services, school-community participation, organisation of co-curricular activities, etc.) are being implemented at the school level; understand the difficulties faced by teachers in their daily school work; develop/modify 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; help teachers and teacher–educators in implementing the interventions; and study if the sub district system and its functionaries have become better in their functioning towards systemic reforms.

The study employed community-based collaborative action research method based on the principle of subsidiarity, 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. On all identified concerns for training, different block level resource persons were identified for different programmes. It is observed that in contrast to other classes, students of Class III have been performing better. Further, it is evident that the performance levels in Social Sciences happened to be an all time low in comparison to Science and Maths, whereas, Kannada language learning turned out to be the most rewarding one. The Upper Primary education registered dearth of desirable state of attainment, whereas, the Primary education was placed on relatively better grounds. The rural students of Classes VI, VII and VIII were faring better than urban students in Science subjects. The teachers of the Block seemed to be burdened with multi-tasking related to the functioning of the school, despite their dedication to teaching. The performance level in English and Hindi nearly touched the nadir reminding the need to appoint subject-specific teachers. Mostly parental help to academicism was non-existent. The infrastructure and other facilities of the schools were striving to fulfill the needs of the students. The contributions of School Development and Monitoring Committee (SDMC) were not much visible in the Block.

Impact study on English Language Training Programme (ELTP) of Karnataka State

The research was conducted with the objectives to make a comprehensive analysis of the Impact of ELTP of Karnataka State on English teachers at the elementary level; to study learner’s mastery of the basic skills in English, the way it has been improved as a result of the ELTP programmes; to find out the effect of teaching with e-Content and ICT on achievement in micro skills; and to study the quality of English teaching in Karnataka. The research study was proposed to make a comprehensive analysis of the English language training programme for teachers conducted by Karnataka State during the last five years. The research was carried out in 20 districts of Karnataka by administering questionnaires and structured interviews with teachers and students. On the basis of the analysis based on scientific methodology, certain inferences were drawn.



Group activities, as an age-old pattern of teaching, seems to be going well with teachers but at the same time, it alone cannot make huge deficits that language education is leaving behind in other matters. The survey and structured interviews are serious pointers to the fact that ELTP, despite their regular occurrence and governmental support, have not delivered the goods as per the expectations. The most important findings of the research study are that the success of the ELTP programmes is largely confined to traditional methods of imparting language skills, whereas, in the more serious concerns related to the integration of ICT based teaching of English language, the ELTP has not made much advancement. Attempts to integrate ICT has not made any significant transformation in language acquisition of the learners as ICT seems to be ending by itself rather than serving as an effective means by exploring the more imaginative uses of it. So the conclusion is that the future ELTP programmes have to be revamped to suit the emerging realities of language teaching rather than its shallow focus on language skills alone.

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

Textbook Analysis on Education at the Elementary Stage in Manipur

The study was carried out to examine the nature of textbooks in terms of reliability, validity and conformity with the curricular framework. The textbooks were analysed against the syllabus prepared by Board of Secondary Education, Manipur, except for science and mathematics, since the textbooks for these two curricular areas were adapted from the NCERT textbooks. Analysis was done in a workshop organised at SCERT, Imphal, from 25 to 29 January 2021. Most of the assessment parameters like coverage of syllabus and linkage, curriculum load, child centred perspective and national concerns were found satisfactory with some variations in curricula area wise. The language textbooks at the primary level need improvement in terms of local knowledge, visuals, activities, orderliness of the topics and technical mistakes. The EVS textbooks required modification and rewriting in terms of segregation of topics, visuals, local context and reduction of load. In the textbooks of social science, there was an imbalance in chapter-wise lessons. Local context is missing in most of the chapters. Besides, less scope for hands-on activity, missing glossary and reflective exercises in some chapters, absence of sufficient examples of relevance and grammatical mistakes were also noticed. Science and mathematics textbooks need incorporation of the relevant local context.

A Study on the Perception of Educational Stakeholders on Mother Tongue Education in Mizoram

The study was conducted with the objectives of knowing the perception of community members, parents, students, teachers or teacher-educators and educational functionaries on mother tongue education and mother tongue education programmes, and finding out the views of the community members (the speakers of a particular language) vis-a-vis, language education. Though Mizoram has four distinct languages— Mizo, (the dominant language), Chakma, Lai and Pawi, the data of the study was limited to only Chakma and Mizo. The research data were collected from parents, community members, teachers,



educational functionaries and students. The study reveals that Mizo language as a subject is studied in all schools. Mizo language is the preferred language of instruction in almost all schools except in a few elite English medium schools. The Mizo people have a positive attitude towards learning Mizo as they perceive that this will improve learning outcomes and preserve the identity of the culture. It is expected that many more policies and programmes will improve mother tongue learning programmes. The Chakma language is not used in the school system because of which students belonging to the community are not achieving the desired results. This group of people long for bringing their language to the system. However, socio-cultural, economic and political factors would play a role in making the breakthrough. It also reveals that there is a dearth of teaching-learning material, availability of writers and teachers in the language.





5. Development Activities

Development programmes that enhance teaching-learning process in all areas of school and teacher education are undertaken by various constituents of 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 *Alternative Academic Calendar* in view of COVID-19 situation; Infographics or Posters, Test Items, Worksheets or Quiz Items and Scripts for Byte sized Video Programmes based on the Learning Outcomes; Foundational Literacy and Numeracy Guidelines and Revision and Codification of Learning Outcomes, etc.

The Council was also involved in the development of e-Content, working papers, learning outcomes, audio-video scripts, tactile books, certificate course, training material and online courses. *A Compendium of Ancient Indian Educational Thoughts in Sanskrit*; *'Nurturing Gifted and Talented Children: A Guiding Framework'* (Guidelines); *Handbook for Teachers on Education of Children with Chronic Health Impairments in Inclusive Classrooms*; *Educational Roadmap for Quality Education for Children Residing in Difficult Terrains in the Country*; *Transformatory Material for Awareness Generation and Attitudinal Change with respect to Gender*; *Training Material on Transgender Concerns in School Education*; *Sangeet Shikshak Sandarshika — A Handbook in Music*; *Teacher's Handbook on Art Integrated Learning*; *Textbook in Visual Arts*; *Textbook in Music*; *Textbook in Hindustani Music — Gayan evam Vadan*; *Textbook in Hindustani Music — Tabla evam Pakhawaj*; *Textbook in Carnatic Music — Vocal and Melodic*; ITPD Modules; *Guidelines for the Development of e-Content for Children with Disabilities*; *Module for Introducing India in Korean Textbooks*; *Mechatronics Laboratory*; *Educational Media Programmes*; e-Resources for the School and Teacher Education (Augmented Reality – Virtual Reality); ICT in Education courses for Teachers and Students; Digital Resources (Video films) on Different Topics of Job Roles in Various Sectors; Short Video films for Pre-vocational Courses; Digital Resources Video Scripts for Vocational Subjects — store operations; student textbooks on different job roles under apparel made-ups and home furnishing Sector; Modules of Diploma in Vocational Education and Training (DVET); Sustainable Development Goals (SDGs) Module, Dynamic Website for Tracking of Programmes, Creating Programme Database, and Sharing and Feedback Mechanism; *Handbook on Experiments and Learning Outcomes in Science at Secondary Level*, etc., were also developed by the Council during the year.

DEPARTMENT OF ELEMENTARY EDUCATION

Alternative Academic Calendar for Classes I to V

The *Alternative Academic Calendar* is to empower students, teachers, school principals and parents to deal with COVID-19 via online teaching-learning resources and help children accomplish the learning outcomes through activities with the help of elders at home. The *Calendar* also contains detailed guidelines for teachers on the use of various technological and social media tools to impart education in interesting ways. The department developed a 20-weeks *Alternative Academic Calendar* in Mathematics, English and Hindi for Classes I to V and in EVS for Classes III to V based on learning outcomes in view of the COVID-19 situation. Keeping in mind the learning gaps that children would be facing due to lockdown at home, the *Academic Calendar* contains many suggestive activities to be done at home with children, practice questions, hands-on projects, links for e-content, guidelines for parents and teachers for effective implementation of activities along with assessment tasks. It was developed keeping in view the latest learning outcomes and in accordance with the post-NCF 2005 syllabus.

Infographics/Posters from Classes I to V based on the Learning Outcomes

A total of 282 infographics were developed (88 in Mathematics, 43 in EVS, 72 in Hindi and 79 in English) for each Learning Outcome for Classes I to V and in EVS for Classes III to V. These were developed to ensure clear and easy comprehension of the learning outcomes to the teachers, parents, guardians and all other stakeholders through visual representation. The metadata sheet based on the same was also developed for the purpose of referencing and uploading on the DIKSHA Portal.

Test Items for Classes I to V based on the Learning Outcomes

Ten test items for each learning outcome for Classes I to V were developed in Mathematics, English and Hindi, and for Classes III to V in EVS for teachers so that they can develop their own assessment items to test the achievement of learning outcomes by children. A total of 4344 assessment questions have been developed in Mathematics, Environmental Sciences, Hindi and English. A metadata sheet based on the same was also developed for the purpose of referencing and uploading on the DIKSHA Portal.

Worksheets and Quiz Items for Classes I to V based on the Learning Outcomes

Creative worksheets and quiz items were developed including activities for each learning outcome in Mathematics, English and Hindi for Classes I to V and for each learning outcome in EVS for Classes III to V. The worksheets contain a variety of questions like puzzles, visual questions, questions based on reasoning and communication along with hands-on activities. These worksheets or quiz items would give a supplementary material for children that would help them achieve the learning outcomes. It would also give some idea to the teachers to develop similar type of worksheets for children. A total of 539 worksheets—88 in Mathematics, 215 worksheets (and 125 quiz items) in Environmental Science, 157 in Hindi and 79 in English have been developed from Classes I to V. A metadata sheet based on the same was also developed for the purpose of referencing and uploading on the DIKSHA Portal.



Scripts for Byte sized Video Programmes for Learning Outcomes

It was felt that small videos should be developed on each learning outcome to communicate its meaning to the teachers, parents and other stakeholders in a more descriptive and comprehensive manner. The scripts for each learning outcome of Classes I to V were developed keeping in mind the objective to facilitate the understanding of the learning outcomes amongst the various stakeholders. The scripts provide an idea of what should be expected from a child on the achievement of a learning outcome. The scripts catering to the learning outcomes in Mathematics, English and Hindi for Classes I to V and in Environmental Studies for Classes III to V were developed.

Foundational Literacy and Numeracy Guidelines and Revision and Codification of Learning Outcomes from Preschool up to Class III

Guidelines for foundational literacy and numeracy along with codification of learning outcomes were developed keeping in mind the needs of various stakeholders. The material was developed keeping in mind the target users (all stakeholders) like parents, teachers and other volunteers involved in the teaching-learning process. So, the learning outcomes were revised wherever required and new learning outcomes were created for Preschool to Class III in a hierarchical manner. Further new coding has been done for all learning outcomes.

Online Course on Pedagogy of Environmental Studies

The course intends to help primary teachers and teacher-educators to understand the objectives and pedagogy of EVS teaching learning. The course material includes 31 modules on 14 themes. These are supplemented with the videos and suggestive web-links. This course has already been launched in 2019 on the 'SWAYAM' portal, an initiative of the Government of India under the Digital India programme, and other portals of the MoE and NCERT, such as e-pathshala, ITPD and NROER. Course material was updated suitably as per the feedback obtained from the candidates.

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

This programme was aimed at developing e-Content in EVS for students at the primary level. The activities are additional teaching-learning resource for children, which may be used by the teachers and parents to help children go beyond the textbooks and learn in a joyful manner.

Play based School Preparation Module for all Class I Children

A three-month play-based school preparation module for all Class I children has been designed to address the developmental and learning needs of all children who enter Class I and who may or may not have any prior preschool experience. It follows a play-based pedagogy and promotes experiential learning with emphasis on the use of developmentally appropriate and indigenous activities and play material. The module is targeted to promote foundational literacy and numeracy at the primary stage by providing ample opportunities to develop the required skills and promote their holistic development in an integrated manner.



Working paper on Early Childhood Care and Education (ECCE)

The working paper on ECCE focuses on the development and learning of young children from birth till eight years of age. This document has been developed as a guiding document that describes the significance of early years, i.e., from birth till three years and 3–8 years and the rationale for addressing these years along a continuum for planning and implementing curricular and pedagogical approaches to optimise children’s learning as per their potential and as evident from the learning outcomes. The document provides an early learning framework, which aims at creating awareness and greater understanding of the importance of ensuring continuity in learning for all children in the age group of 3–8 years.

Training Modules on Foundational Literacy and Numeracy for NISHTHA

Teacher training modules on Foundational Literacy and Numeracy (FLN) are being developed for uploading on the DIKSHA portal. There are 10 modules focusing on the details of the Mission. Need for competency based Education, How Children Learn?, Language and Literacy, Numeracy and Mathematical Thinking, Learning Assessment, Transacting Play based Module in *Balvatika*, Role of Parents and Community, Integration of ICT, and Multilingual Education are the major themes around which modules are being developed.

Training Modules for Capacity Building of Teachers and Teacher-educators on Early Childhood Education (ECE)

The need for quality ECE has been emphasised in *Samagra Shiksha* and also in the *National Education Policy 2020*. This has led to large expansion of and need for quality ECE both in the Government and non-governmental sectors. This expansion has created the need for trained personnel in large numbers, which, in turn, has necessitated the organisation of in-service training programmes in PSE. The need based training and appropriate modules at the preschool stage help ensure opportunities for holistic learning and growth for all young children and also strengthens transition to early primary classes, i.e., I and II. During the year 2020–2021, a Comprehensive Professional Development Package (CPDP) consisting of 14 interactive modules has been prepared. The training package includes the knowledge content, appropriate pedagogical practices and training strategies.

DEPARTMENT OF EDUCATION IN LANGUAGES

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

e-Content is being developed to supplement the textual material in four languages— Hindi, English, Urdu and Sanskrit. The programmes are aligned to NCF and the syllabus from primary to senior secondary stages. More than 100 programmes in four languages in the format of audio and video have been developed. The tasks and activities are designed to enhance the language skills. The e-Content familiarises learners with usage, grammar, reading comprehension, vocabulary and writing process, etc. Effort is being made to develop the material keeping in view the parameters, such as age, interest, inclusion and flexibility in assessment.



Learning Outcomes in Hindi, English, Urdu and Sanskrit for the Higher Secondary Stage

Learning outcomes for Higher Secondary Stage have been developed in four languages for the assessment of language skills and advanced linguistic proficiency. Learning outcomes are based on the language curriculum, and provide pedagogic inputs for promoting critical thinking, creativity, reflection and communicative competence.

A Compendium of Ancient Indian Educational Thoughts in Sanskrit

The *Compendium of Ancient Indian Educational Thoughts in Sanskrit* is a fine collection of about a thousand references in education from a variety of Sanskrit literature beginning from the *Vedas* to different *Shastras* of the nineteenth century. The references are taken from about 150 texts of ancient and medieval India, giving insight into various branches of education, such as educational philosophy, psychology, administration, environment and pedagogy, etc. The collection is systematically arranged in the order of above topics with Hindi and English translation.

Learning Outcomes based Activities under Roadmap of NCERT

Activities, worksheets, infographics and byte-sized videos in the four languages—Hindi, English, Urdu and Sanskrit have been developed for use by teachers, learners, parents and those interested in education of children in school. These material include more than 20 activities for each learning outcome, worksheets based on learning outcomes to be used by teachers and also for the conduct of National Achievement Survey (NAS), infographics depicting the learning outcomes and tasks for achieving the learning outcomes and short, byte sized videos of two to five minutes. These will be made available to teachers, learners, parents and others in all school systems across the country.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Guidelines Nurturing Gifted and Talented Children:

A Guiding Framework

The draft guidelines titled 'Nurturing Gifted and Talented Children: A Guiding Framework' has been developed with the objective to identify talent in children in different subjects or areas; and to provide opportunities to children for mentoring their talents in schools, and nurturance at school, state and national levels through different modalities and supportive resources. Olympiads and competitions have been included in this guiding framework as one of the crucial strategies for identification of talents besides application of specific testing tools, teachers and parents reports, etc. The major highlights of this document include conceptual framework, the need for identification and nurturance, significant milestones in interventions, NEP 2020 recommendations on education of gifted and talented children, strategies for identification of talents, conduct of Olympiads and competitions, methodology for nurturance at the school level, school complexes, districts, State, national level, implementing the programme at the national level through the *Pradhan Mantri Innovative Learning Programme—DHRUV*, and other implementation strategies, capacity building of teachers, ICT based supplementary resources, fast track admissions,



incentives or support to gifted and talented children, regional or nodal plan of action with responsibilities and timelines and expected outcomes.

Handbook for Teachers on Education of Children with Chronic Health Impairments in Inclusive Classrooms

The *Handbook for Teachers on Education of Children with Chronic Health Impairments in Inclusive Classrooms* has been developed to create awareness among teachers on learning needs of children with different Chronic Health Impairments (CHI) (causing disabilities) as specified in the Rights of Children with Disabilities (RPwD) Act, 2016, and to strengthen competencies of teachers for providing quality education to children with CHI in inclusive classrooms. The review of different literature, articles, studies and material resources have been explored and studied to develop the Handbook. Draft chapters on different health related disabilities as specified in the RPwD Act 2016, namely children with multiple sclerosis (under chronic neurological conditions), haemophilia, thalassemia and sickle cell disease (under chronic blood disorders) and muscular dystrophy and acid attack victims (under chronic physical health conditions) and mental illness (under chronic mental health conditions) have been prepared. The outline structure of each chapter is conceptualised and developed as per the specific disability, its nature, occurrence rate, possible risk factors or causes, evaluation mechanism, treatment available, implications on child's health, education, socio-psychological well-being, teachers' role in teaching and learning, emergency measures to be taken in school, measures to be taken for persistent absenteeism from class due to health conditions, individualised support and package programme, assessment criteria to be adopted, involvement of parent and siblings in education of the child, etc.

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

This project was undertaken with the objective to understand the effect of the socio-political conflicts on the quality of education, the educational problems and needs of children residing in difficult terrains, the interventions and initiatives taken by the education department of the States and to prepare the educational roadmap for improving the quality of education. The *Educational Roadmap for Quality Education for Children Residing in Difficult Terrains in the Country* has been developed and shared with Manipur, Tamil Nadu and Jharkhand for improving the quality of education in elementary schools with high Scheduled Tribes (ST) population. The draft educational roadmap was tried out at Chandel District, Imphal, Manipur.

DEPARTMENT OF GENDER STUDIES

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

The project was undertaken to identify the themes or issues necessary for bringing attitudinal changes with respect to gender, and develop transformatory materials in the form of posters, booklets, brochures, concept cards, etc. Existing material on issues related to gender and its varied dimensions in the context of school education was procured and examined.



A number of themes pertaining to gender issues and concerns that the girls, boys and transgender children have, were identified and then discussed in a workshop consisting of academicians, artists and NCERT faculty members. Some of the important issues or concerns or themes that were finalised in the workshop were: Menstrual Health — Taboos and Acceptance, I am What I am, Transgender Issues, Change Makers, Pledge by Boys, Pledge by Girls, Women through the Pages of History, Concepts related to Gender, Tackling Violence against Girls, Bringing Attitudinal Changes, etc. Based on the themes, the scripts for transformatory material in the form of posters, booklets, cards, slogans, etc., were developed. Once the scripts on various themes were developed, the artists developed illustrations or images and also carried out the layout designing of the material. The draft material were examined and reviewed in a series of workshops after which the transformatory material was finalised. The material is likely to impact the perceptions of teachers or teacher-educators and how they project their own attitudes, beliefs and practices in the classroom and beyond. The material will be sent to all the state level key functionaries, including gender coordinators for use in their programmes and will be disseminated widely.

Training Material for Teachers and Teacher-educators on Transgender Concerns in School Education

In order to identify relevant themes and develop material for sensitisation of teachers and teacher-educators, material on issues related to transgenders, especially, school education and other related literature was collected from various sources. Based on this, themes or issues or concerns were identified and finalised in an online workshop. The online workshop with the material developers was held to review the material being developed. The draft material is ready and will soon be ready for use.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

Online Course in Social Sciences for Teachers teaching at the Secondary Level

An Online Course in Social Sciences for Teachers Teaching at Secondary Stage has been developed. The course contains 20 modules, focusing on the pedagogy of social science subjects, i.e., History, Geography, Political Science and Economics. Besides the content areas, there are modules on generic issues like gender-inclusive pedagogy, teaching-learning resources, curriculum development and assessment in social sciences, learning outcomes, consumer awareness and financial literacy. The modules also consist of references for teachers, web-links, MCQs, etc. The course will be helpful in equipping the teachers with recent developments in the content and pedagogy of social science subjects. The course has been submitted to the CIET for video recording.

Working Paper on Social Science, and Health, Physical Education and Yoga

The working paper focused on the importance of social sciences in the school curriculum, social science as reflected in the Curriculum Frameworks and significant researches in this domain of knowledge. The paper also highlighted emerging issues and challenges in the teaching and learning of social sciences at the upper primary and secondary stages.



The other areas reflected in the paper mentions the emerging trends in social sciences and recommendations in the light of *National Education Policy 2020*.

The Working Paper on Health, Physical Education and Yoga discusses the overall health scenario prevalent in the country, with emphasis on the health status of children, including adolescents. In addition, the paper makes a mention of the programmes and initiatives of the government. Physical education and Yoga have been dealt with in a separate section. The importance of health concern, physical education and yoga in all policies and curriculum frameworks has been briefly stated. The importance of these areas as reflected in the *National Education Policy 2020* is also mentioned. The paper summarises the way forward and strategies that are needed to make this emerging concern an integral part of the school curriculum.

Alternative Academic Calendar for Social Sciences

The *Alternative Academic Calendar* in all content areas was developed from Classes VI to XII for four weeks and eight weeks, which include activities and web resources that students can access during the pandemic. The material was developed in both English and Hindi.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Learning Outcomes at the Higher Secondary Stage for Subjects—*Biology, Biotechnology, Chemistry, Physics and Mathematics*

The NCERT has developed competency based learning outcomes at higher secondary stage in the subjects— biology, chemistry, physics and mathematics. The learning outcomes at the higher secondary stage are in continuum with the learning outcomes at the secondary stage. The documents contain competencies, which the learners are expected to develop by the end of Class XII. These documents include suggested pedagogical processes, curricular expectations and some examples, which may be adopted or adapted to achieve these learning outcomes. The documents are expected to support and facilitate integrated and holistic learning approaches to achieve them. Assessment is inbuilt in the pedagogical processes; the teacher may further plan, design and carry out assessment as per the competency to be assessed. The focus of the document is to shift the teaching-learning and assessment from content to the process of science. Learners need to develop competencies in academic settings, which they can use in real-life context even after they leave school. These documents have been shared with educationists, parents and students for their feedback and utilisation.

Alternative Academic Calendar

During the COVID-19 pandemic period, it has been the responsibility of the NCERT to provide multiple alternative ways of learning through interesting activities. The NCERT has developed *Alternative Academic Calendar* for all stages of school education. Initially, this *Calendar* was prepared for four weeks, which was further extended to 20 weeks. In this *Calendar*, the themes or topics have been selected from syllabus and the same have been linked with the learning outcomes. It is a matter of fact that many teachers and parents have simple mobile phones available as a tool at their homes. They do not have virtual classroom facility. In view of this, the activities are designed and presented in such a way that



many activities can be conducted by the parents and students by themselves by co-ordinating with the teachers over the phone. The teachers can contact parents and students using a range of tools starting with simple mobile phones to Internet-based diverse technological tools to give them guidelines in conducting the activities given in the *Calendar*.

In science and mathematics, total 20 weeks of *Alternative Academic Calendar* have been developed for Classes VI to VIII for school principals, teachers, parents and students. This included suggestions related to activities to be done and resources to be used for learning in an interesting manner when schools were closed due to the pandemic.

Secondary Stage: Themes/topics for the *Academic Calendar* have been selected from the syllabus of the Secondary Stage, i.e., Classes IX and X, and are linked with the learning outcomes. The purpose of mapping of themes with learning outcomes is to facilitate teachers and parents to assess the progress in students' learning. This *Calendar* includes suggestive science and mathematics activities, games and other learning tasks which students can perform easily at home. Various video links related to demonstration activities, interactive quiz and assessment questions have been provided, so that students can learn science concepts and self-assess themselves without getting stressed. Teachers and parents may opt to do the activities that the students show interest in. It is expected that teachers may design more such activities based on the given learning outcomes. It has been suggested that the teacher may connect with students either through *WhatsApp*, mobile phone, e-mail, etc., or may do audio and video calling with a group of students and discuss with them in small groups or with all of them together. Peer learning or group learning through these tools has also been suggested. In case of Children with Special Needs who need parents' support, teacher may guide parents on the activities to be conducted at home. It has also been suggested that students may take a break after doing some activities and do some physical exercises, such as stretching, skipping, dance, yoga, indoor games, etc., to keep themselves stress free. In order to provide uninterrupted learning despite the closure of schools due to the ongoing COVID-19 pandemic, resources for the *Alternative Academic Calendar* have also been prepared.

Higher Secondary Stage: *Alternative Academic Calendar* in Biology, Chemistry, Physics and Mathematics for Classes XI and XII was developed for 20 weeks for school principals, teachers, parents and students. This included suggestions for activities to be done and resources to be used for learning in an interesting manner while schools were closed due to COVID-19.

Working Paper on Science Education

The Working Paper on Science Education has been developed in light of NEP 2020. In this paper, an attempt has been made to incorporate suggestions for addressing various issues and concerns related to science education for middle and secondary stages of school education. Some of these are infrastructure, curricular material (textbooks and other teaching-learning materials), pedagogy, experiential learning, twenty-first century skills, holistic development of children, learning outcomes and assessment, expanding the scope of ICT, addressing the needs of all children for inclusion, nurturing



students with special talents, rationalisation of curriculum and linkages among stages of school education.

The paper also discusses the broad guidelines of the curriculum framework at the national level. The syllabi and the textbooks must allow space for contextualising and variations at the local level. The syllabus and textbooks should have reduced emphasis on mere information and provide greater exposure to what it means to practice science. Also, the curriculum should be dealt with in an integrated way with interconnectedness and interrelationships between the different curriculum areas. The areas, where Indian contribution has been significant in general science education, should be included in the curriculum. The steep learning gradient across different stages of school education is to be avoided.

Activity-based teaching needs to be sufficiently translated to actual classroom practice, while helping the learner acquire the methods and processes that lead to generation and validation of scientific knowledge. An assessment process, that gives a holistic, multidimensional view of the students' progress as well as the uniqueness of each student in the cognitive, affective and psychomotor domains on the basis of learning outcomes in science, needs to be adopted.

Working Paper on Mathematics Education

The Working Paper on Mathematics Education and Computational Thinking has been developed by a team of NCERT faculty. Different aspects of mathematics education have been discussed in this paper. In order to make mathematics education more joyful as per the expectations of NEP 2020, the working paper talks about improvements to be made in classroom structure, curricular material, use of ICT, teacher professional development, etc. Computational thinking is a relatively new field to be introduced in the education system and the working paper talks about it in detail.

Working Paper on Environmental Education

The Working Paper on Environmental Education has been prepared. In order to accomplish this, faculty members from NIE and RIEs were involved in the development of the draft document. This was reviewed by an external committee constituted by the Director, NCERT. The document was finalised by incorporating the suggestions and inputs from the reviewers. The Working Paper discusses the need for environmental education, its nature and status especially in the context of India. It also discusses the way forward in the implementation of Environmental Education keeping in view the recommendations of NEP 2020.

e-Content in Science and Mathematics for the Upper Primary, Secondary and Higher Secondary Stage in English, Hindi and Urdu Languages

In order to provide the students access to quality educational material, a large number of curriculum based video programmes have been developed in collaboration with CIET for PM eVidya. The video programmes have been developed in Science for Classes VI to X; in Biology, Chemistry and Physics for Classes XI to XII; and in Mathematics for Classes VI to XII both in Hindi and English languages. These programmes are being telecast over dedicated channel for Class XII under 12 DTH channels launched by the MoE, GOI, on 24×7 basis. Besides, audio-video material for experiments and activities based



on laboratory manual in biology at higher secondary stage have also been developed. Also, audio-video material in chemistry at higher secondary stage have been developed to facilitate students and practising teachers to carry out experimental works supplementing hands-on approach.

Audio-video Scripts based on ‘Handbook on understanding Science through Activities, Games, Toys and Art Forms at the Secondary Stage’

The major objective of the programme is to develop audio-video material based on ‘Handbook on understanding Science through Activities, Games, Toys and Art Forms at the Secondary Stage’. The Handbook aims to make teaching-learning process of science inclusive, interesting, interactive, child-friendly, and preserve our cultural heritage by integrating traditional games and various art forms. Some exemplar programmes will be developed to facilitate teachers and students to get an understanding on how to utilise the Handbook inside and outside the classroom effectively.

Learning Outcomes based Activities under Roadmap of NCERT in Science and Mathematics for the Upper Primary and Secondary Stage

The Learning Outcomes for science and mathematics for upper primary and secondary stages have been developed by NCERT. To ensure effective implementation of these learning outcomes, learning outcomes based byte sized videos, infographics, worksheets, assessment items in science for upper primary (Classes VI–VIII) and secondary stage (Classes IX and X) in science and mathematics have been developed. These learning outcomes based demonstration videos will help teachers assess their students in science and mathematics at the upper primary and secondary stages.

Infographics for all Learning Outcomes for the upper primary and secondary stages can be used as an ideal tool during teaching-learning process. Worksheets have been developed in science and mathematics on various concepts to achieve learning outcomes at the upper primary (Classes VI–VIII) and secondary stage (Classes IX–X) and can be used as assessment tool. These can be used by teachers to understand students’ previous knowledge, process and the outcome of their learning. These can also be used by students for self-assessment.

Assessment items were developed to measure each learning outcome in science and mathematics at the upper primary (Classes VI–VIII) and secondary stage (Classes IX–X). At least 10 items, each to measure each learning outcome in at least two levels of proficiency in science and mathematics at the upper primary and secondary stage have been developed. These items are one of the resources developed for implementing a learning outcome centric approach in an effective and timely manner, leading to the all-round improvement in learning outcomes and learning levels of students.

The NAS 2017 at secondary stage had identified difficult sports on the basis of themes, such as ‘Moving Things’, ‘People and Ideas’ (Class IX) and ‘How Things Work’ and ‘Natural Phenomena’ (Class X). Therefore, various resources for students like worksheets and infographics, and for teachers like PowerPoint presentations and teaching resources have been developed covering all learning outcomes of science at the secondary stage. In these resources, attempts have been made to make teachers understand how their students can achieve learning outcomes using various examples.



Tactile Books in Science and Mathematics at the Upper Primary Stage

The textbooks of science at the upper primary stage developed by NCERT are available in Braille script by other recognised institutions working for students with visual impairment. However, illustrations, diagrams or pictorial explanations of the concepts have not been provided in them. Therefore, it has been a challenge for students with visual impairment to ‘visualise’ the content given in those Braille textbooks. Such limitations in the availability of appropriate resources to replace the illustrations or diagrams for the benefit of students with visual impairment have deterred them from learning scientific concepts effectively. Therefore, the tactile books in science have been planned to be developed separately for each class for the upper primary stage. It is envisaged that this material will help students with visual impairment to understand scientific concepts in a better way and also motivate them to learn and take interest in science subjects.

DEPARTMENT OF CURRICULUM STUDIES

Certificate Course in Curriculum Design

The certificate course in curriculum design and development has been developed for teacher-educators, teachers and curriculum developers as well as researchers, for enhancing their competencies in planning, designing, and implementing the curriculum. The course contains four modules, which are: (i) Introducing Curriculum: Characterisation, Definitions, Associated Concepts and Curriculum Components; (ii) Curriculum Design: Definitions, Sources of Curriculum Design, Curriculum Design Models, Design Dimension Considerations and Types of Curriculum Design; (iii) Disciplinary Foundations and Curriculum; and (iv) Curriculum Approaches. In light of NEP 2020 recommendations, required changes are being made in the course material and the course will be launched in 2021–22. 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 course is designed for the faculty from SCERTs, DIETs, school teachers, potential teachers, researchers, school heads, curriculum developers, and other organisations dealing with educational innovations.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS

Sangeet Shikshak Sandarshika — A Handbook in Music for Upper Primary Teachers in English

Sangeet Shikshak Sandarshika, originally developed in Hindi language, has been translated into English as *Handbook in Music for Upper Primary Classes*. This Handbook intends to help teachers recall and revise concepts of Indian Classical Music (both Hindustani and Carnatic music). It has content on terminologies, concepts of *Swar* and *Laya*, and their evolution over the ages. The Handbook presents an idea of the historical development of Indian Music, mostly related to Indian Classical Music. The other topics integrate information regarding the musical instruments of India and their classification, folk music of India, life of musicians who have contributed nationally and globally, impact of music on the brain of individuals and its therapeutic consequences, etc. Important chapters have been developed on the interrelation of varied art



forms, art integrated learning and the role of music teachers in school. These were intended to enable teachers to comprehend and innovate new paths for interdisciplinary approach. The Handbook is under publication.

Teachers' Handbooks on Art Integrated Learning for Primary and Upper Primary Teachers

Art Integrated Learning (AIL) is a framework of experiential learning, which provides an equitable learning environment to all learners through their own access points. It is a process where art becomes the medium of teaching-learning, a key to understanding concepts within any subject of the curriculum. Learners explore creatively while building connections between different concepts through various art forms. The content of Teachers' Handbooks have been divided in three documents for the convenience of the users: (i) Art Integrated Learning Guidelines for Educators and Educational Administrators of Elementary Level of School Education, (ii) Teachers' Handbooks on Art Integrated Learning for Teachers teaching Classes I–V and (iii) Teachers' Handbooks on Art Integrated Learning for the Middle Stage.

The document of *Art Integrated Learning Guidelines for Elementary Level of School Education* has been published in Hindi and English under the 100 days Agenda of Prime Minister. Both versions are available on the NCERT website in PDF format. The hard copy of both the versions with ISBN: 978-93-5292-214-7 are available at the NCERT publication counters. The try-out edition of the teachers' handbooks: (i) for primary teachers and (ii) for upper primary teachers is ready, and has been shared with teachers for its field testing and their observations for improvement thereafter. The handbooks will be ready after incorporating the suggestions received from teachers and vetting by the experts.

Textbook in Visual Arts for Class XII

An Introduction to Indian Art – Part 2 is a textbook for the students of Class XII, who have opted for Visual or Fine Arts. It was published in August 2020 and its Hindi and Urdu translated versions are under the process of publication. There are eight chapters in the textbook, mainly covering the tradition of paintings during the medieval and modern periods in India, spanning almost 1000 years. The last chapter has examples of regional art practices by people and communities. The textbook is QR code embedded, having many other resources and has more than 100 colour plates with description.

Textbooks in Music for Class XI

Indian Classical Music, which is opted by students at the secondary level has two streams — Hindustani and Carnatic. Textbooks have been developed in both areas. Keeping in view the NEP 2020, the content has been finalised. The content covers the historical development of different areas of music like vocal music, instrumental music, terminologies and theories of Indian music, *raga*, rhythm and its interpretations, *gharanas*, stalwarts and their contributions, evolutionary processes in the field of music, interdisciplinary approach, music as therapy, folk music of different regions, etc.

Textbook in Hindustani Music — Gayan evam Vadan for Class XI

The textbook has been developed for the theory part of vocal music and melodic instruments like *sitar*, *sarod*, flute, etc. It has chapters on the historical



development, musical terminologies, four categories of musical instruments, *raga* system and compositions. The textbook has been approved by the Curriculum Committee. In addition, the textbook has been translated into English and the final vetting has been done.

Textbook in Hindustani Music – Tabla evam Pakhawaj for Class XI

The textbook has been developed for the theory part of Percussive instruments like *Tabla* and *Pakhawaj*. It consists of chapters on the historical development of music and evolution of the instruments, *bols* or units, playing techniques and contribution of stalwarts. This textbook has been approved for publication by the curriculum committee and has been sent to the Publication Division for printing. Also, it has been translated into English and the final vetting has been done.

Textbook in Carnatic Music — Vocal and Melodic for Class XI

The textbook has been developed for the theory part of vocal music and melodic instruments like violin, *veena*, etc. It covers the historical development of carnatic music, musical terminologies, musical instruments, contributions of stalwarts, *raga* system, compositions and the *tala* system.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Working Paper on Value Education in Schools

The primary aim of education is facilitating holistic development of students which includes character formation. Therefore, education and value education share the same goal. However, value education makes concentrated efforts by providing stage-appropriate focused attention on ethics, human and constitutional values. A child's pace of development varies according to one's stage of development, such as foundational stage, preparatory stage, middle stage and secondary stage. These changes correspond with the development of the brain and physiological changes, and result in changes in the child's thinking, emotions, perception and social behaviour. The draft of Working Paper on Value Education was prepared. This working paper aims at preparing teachers, teacher-educators and school leaders to implement value education in schools by adopting the whole school approach.

Working Paper on Guidance and Counselling

The draft of 'Working Paper on Guidance and Counselling' aimed to provide a framework for integrating guidance and counselling approach in the school system. In the working paper, an attempt was made to put forth different facets of guidance and counselling, both as a process and as a service, and challenges faced while implementing the guidance and counselling services. The working paper offers a developmental perspective, wherein, the integration is at all stages of school education and involves all stakeholders, such as school leaders, teachers, parents, community, counsellors, etc.



DIVISION OF EDUCATIONAL RESEARCH

Collating Abstracts of Researches conducted at State and NCERT Level for the Development of Research Portal

The NCERT has initiated the work of preparing a research portal for collating researches at the NCERT and SCERTs. It is proposed to collect their studies or researches and upload them under proper taxonomy and make available to the general public. A committee was constituted under the Chairmanship of Director, NCERT, to take forward various tasks. Meetings of the committee were held to discuss the modalities of taking up the work. Coordinators from SCERTs and NCERT departments have been identified for the preparation of abstracts. The format for developing abstracts has been prepared.

To take up the work of preparation of abstracts, faculty members from SCERTs and NCERT have been identified as coordinators. The coordinators would prepare the abstracts on the basis of the format developed. An orientation meeting through online modality was held with coordinators to discuss the format for preparation of abstracts. Subsequently, meetings will be held with the State and NCERT coordinators for follow-up on preparation of abstracts. The abstracts sent to the department would be examined to identify gaps or missing aspects and the feedback will be shared with the respective coordinators for modification and resubmission. The development of the portal is being undertaken by the CIET, NCERT.

DEPARTMENT OF TEACHER EDUCATION

Exemplar and Assessment Questions based on Learning Outcomes at the Secondary Level

The Learning Outcomes for the secondary stage have been prepared in the subjects of English, Hindi, Sanskrit, Urdu, science, social science, mathematics, health and physical education and art education. The document has been prepared in English and Hindi. The document marks a paradigm shift from content based learning to competency based learning. Also, exemplars in each subject and assessment questions have been developed for helping teachers design effective classroom interaction and achieve learning outcomes.

ITPD Modules for Science, Mathematics, Social Science and Language Teachers

Under this programme, In-service Teacher Professional Development (ITPD) modules in the areas of science, mathematics, social science and languages have been developed, updated and finalised. The finalised version has been reviewed with the help of experts and senior faculty members from content departments for further improvement. The following modules have been converted into the online mode: I. Generic Modules: *Module 1: Teaching of Science at the Upper Primary Level; Module 2: Understanding the Learner and Learning; Module 3: School based Assessment; Module 4: Integrating ICT in Science Teaching;* II. Modules on Pedagogy of Science: *Module 1: Acids, Bases and Salts; Module 2: Air and Soil Pollution; Module 3: Changes around us and Physical and Chemical Changes; Module 4: Forest, Coal and Petroleum; Module 5: Food from Plants and Animals; and Module 6: Motion and Measurement.*



INTERNATIONAL RELATIONS DIVISION

Guidelines for the Development of e-Content for Children with Disabilities

The GoI launched PM eVidya initiative on 17 May 2020 with an aim to unify all efforts related to digital or online or on-air education. The programme *inter alia* envisages development of special e-Content for Children with Disabilities (*Divyang*). In pursuance of this vision, the Department of School Education and Literacy, Ministry of Education, nominated a committee of experts for developing guidelines for e-Content for Children with Disabilities (CwDs). This committee made an attempt for the first time to develop guidelines for preparing e-Content for CwDs. The committee submitted a document titled 'Guidelines for Developing e-Content for CWDs' comprising 11 sections and two appendices.



Module for Introducing India in Korean Textbooks

The Indian Embassy in Soeul, the Republic of Korea (RoK), was requested to prepare reading material for introducing India in Korean textbooks. A module titled 'India: Glorious Past, Dynamic Present and Promising Future' has been developed. The module, as per the requirement, highlights India's past glory and its cultural influence abroad, post-Colonial developments, societal change, industrialisation and other socio-economic transformations. It will be a significant step towards cultural literary exchange between the two countries and will initiate an interest among Korean children about India in their early years. The content aims to disseminate the core Indian values to children in RoK. Illustrations and bibliographies have been carefully chosen from reliable sources that are available in the public domain. The process of including Indian contents in Korean textbooks in an incremental manner is being undertaken by the Indian Embassy in Seoul, RoK; Ministry of Education, RoK; and the RoK Embassy in New Delhi. Similarly, NCERT has introduced aspects of Korean democratisation and modernisation in the NCERT textbooks for our students.



Mechatronics Laboratory in Demonstration School, RIE Bhopal

The NEP 2020 lays special emphasis to promote vocational education early at the school level. The RoK is one of the leading countries in providing vocational education to children. Under the NCERT and RoK project, *Vocational Education and Training in Mechatronics*, two virtual meetings were held between the Korea Research Institute for Vocational Education and Training (KRIVET), PSSCIVE, Bhopal and NIE faculty in the month of August 2020. The discussions centred around learnings from the Korean experience and setting up a Mechatronics Laboratory with appropriate equipment at DM School, RIE, Bhopal.

The Ambassador of the RoK embassy in New Delhi and his team visited PSSCIVE and RIE, Bhopal, from 16 to 18 December 2020 to study the project developments, including the procurement of equipment for the Mechatronics



Laboratory, utilising the grant of USD 0.2 million sanctioned by the RoK embassy, New Delhi. Based on the learnings of this pilot project, Mechatronics, as a subject, will be introduced in an incremental manner in other Demonstration Schools of the NCERT and also in government-funded schools.

LIBRARY AND DOCUMENTATION DIVISION

NCERT Institutional Repository

The objective of this programme is to make available the NCERT publications as institutional repository. This collection manifests the scale of the NCERT's achievement in the area of school education. Around 500 NCERT publications have been uploaded on DSpace software with watermark and fully searchable text format. Institutional Repository will soon be accessible on NCERT Intranet.

Interlinking of all NCERT Libraries

Interlinking of NCERT libraries aims to develop the Union Catalogue of constituent Libraries to enhance the utilisation of documents available in NCERT libraries. At present, all libraries, including Demonstration Multipurpose Schools of RIEs are fully automated and linked to their institutional websites. The library database is accessible through the WEB-OPAC.

CURRICULUM GROUP

National Curriculum Framework

The process for the development of National Curriculum Framework in light of NEP 2020 has been initiated. Different themes, such as curricular areas, cross-cutting issues and themes related to other areas of NEP 2020 were identified for the areas of school education viz., Early Childhood Care and Education, Teacher Education and Adult Education for developing working papers to provide inputs for the Position Papers of National Focus Groups which will in turn be giving inputs for the development of National Curriculum Frameworks for School Education, National Curriculum Framework for ECCE, National Curriculum Framework for Teacher Education and National Curriculum Framework for Adult Education. Till now, 22 working papers internal presentations and consultation sessions were held within NCERT and its constituent units. Five working paper presentations were made before the Ministry of Education, Government of India, for comments and suggestions. A meeting regarding the tasks of NEP 2020 pertaining to NCERT and CBSE was held on 19 March 2021. The defined tasks as outlined in the NEP 2020 were discussed along with the roles, and responsibilities, and collaboration among institutions for the implementation of NEP 2020 as per the primary mandates of respective institutions.

Toy based Pedagogy

An Expert Group was constituted on Toy based Pedagogy by the Ministry of Education in September 2020. Four meetings related to toy based pedagogy were conducted by the Expert Group. About 100 toys, including indigenous toys, have been identified and mapped with concepts taught at primary, upper primary, secondary and senior secondary stages in different subject areas, such as science, mathematics, social science, languages, etc. It is envisaged



that toy based pedagogy will form an important teaching-learning strategy for learning various concepts. Workshops for the development of problem statements for the 'Toycathon' were also conducted in the month of December 2020 and around 60 problem statements were contributed to the Innovation Cell, Ministry of Education.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Online Certificate Course on Research Methodology in Education

The Online Course on Research Methodology is the first-of-its-kind with a purpose to help participants conduct research to address educational problems viz., policy initiatives, interventions, pedagogical experiences, recent developments, impact, etc. The course also aims to prepare them in conducting research in the area of In-service Teacher Professional Development (ITPD). The course shall provide conceptual understanding into the processes of research.

The programme intends to develop and run an online course on research methodology that can be helpful for researchers. A total of 13 modules have been developed, viz.

1. Basics of Research
2. Sources of Problem
3. Hypothesis
4. Sampling
5. Tool/Instrument
6. Methods of Research
7. Experimental Designs
8. Scales of Measurement and Basics of Statistics
9. Correlated t-test and t-test
10. Analysis of Variance
11. Analysis of Covariance
12. Correlation and Partial Correlation
13. Report Writing

The following six modules, viz., Trend Analysis; Multiple Correlation and Regression Analysis; Factor Analysis; Non-Parametric Statistics; Qualitative Research; and Applications of ICT in Research are being finalised. Test Yourself/ Evaluation Questions, Further Readings and videos for each module have been uploaded on the ICT curriculum portal. Also, a total of 37 video tutorials on various topics have been recorded and uploaded as per research methodology courses in education.

Educational Media Programmes: Audio Production and Dissemination

During April 2020 to March 2021, about 1100 audio programmes were produced. These programmes included NCERT textbook based audio books in all subjects, viz., Hindi, English, Sanskrit, Urdu, Mathematics, Science, Environmental Studies, Social Science, etc. Other audio programmes were produced on— *Akshar ki Kahani*, *Children with Special Needs (CwSN)*, *Girl Child*, *Folk Stories*, *Environment*, *Guncha-e-Shayari* (Urdu Poetry), *Urdu Afsana* (Urdu Stories), *Kala Utsav*, *Yoga Olympiad*, *New Media Interactive*, *Nectar of Poetry*, *Science Songs* and documentaries on various famous personalities.



A total of 315 pieces of curriculum-based radio programmes (Classes I–VIII) and six for Class X produced by CIET-NCERT are shared for its dissemination/ broadcast on 88 Radio Stations (12 *Gyan Vani* FM Radio Stations, 76 Community Radio Stations). The podcasts are also available on *iRadio* and *Jio Saavn* Mobile apps.

Educational Media Programmes: Video Production and Dissemination

During April 2020 to March 2021, about 1933 video programmes have been produced by CIET-NCERT. These explanation videos are related to school subjects, viz., Hindi, English, Sanskrit, Urdu, Mathematics, History, Geography, Political Science, Economics, Sociology, Psychology, Environmental Studies, Business studies, Accountancy, etc. In addition, video programmes based on sign language for CWSN students have also been produced.

These video programmes are used to feed the telecast of 12 PM eVidya channels including:

1. **Channel 1 to 10 (Classes I to X):** two hours fresh slot with 11 times repeat. The slot starts at 12 o’ clock night.
2. **Channel 11 and 12 (Class XI and XII):** three hours fresh slot with eight times repeat. The slot starts at 12 o’ clock in the night.

Live Telecast on SWAYAM PRABHA and PM eVidya Channels

Due to the COVID-19 outbreak and lockdown in the country, the live telecast was affected and closed for 13 days (21 March to 2 April 2020). Live telecast programmes on SWAYAM PRABHA Channel #31 (April 2020 to August 2020) and PM eVidya DTH-TV channels (September 2020 to March 2021) have been transmitted. For students, teachers, teacher–educators and parents, who do not have access to the Internet, the DTH-TV networks are being utilised during the lockdown due to COVID-19 outbreak. Breaking the limitations of COVID-19 outbreak, NCERT has utilised Internet-based online platform to telecast live interactive programmes on SWAYAM PRABHA DTH Channel Kishore Manch (#31). The experts or teachers took live sessions from their respective homes. The live interactive programmes were being telecast for eight-and-a-half hours on Monday, Wednesday and Friday and seven-and-a-half hours on the rest of the days. Live telecasts were held on all days including Saturday, Sunday and gazetted holidays during the lockdown. Webinar programmes on ICT tools are being telecast live for one hour from 4.00 pm to 5.00 pm with effect from 7 April 2020 to help the teachers orient on new ICT tools for teaching–learning and evaluation. ‘SAHYOG: Guidance and Counselling for Mental Health and Well-being of Children’ started from 4 May (5.00 pm to 5.30 pm). Overall, 11 live interactive programmes (8 curriculum-based content, 1 Live Webinar on ICT tools and 1 Live guidance and counselling session on mental health and well-being of children: “SAHYOG” and 1 NISHTHA integrated teacher training) were transmitted covering eight-and-a-half hours daily transmission. The following tables cover the numbers and hours of live interactive programmes during April 2020 to March 2021.



April 2020 to August 2020 on SWAYAM PRABHA Channel #31

Content Coverage	Telecast (From – To)	No. of Live Programmes	Hours of Telecast
Primary Stage	3 April 2020 to 31 August 2020	307	238
Upper Primary Stage	15 April 2020 to 31 August 2020	294	225
Secondary Stage	6 May 2020 to 31 August 2020	270	190
Higher Secondary Stage	13 April 2020 to 31 August 2020	222	167
Webinar on ICT tools	07 April 2020 to 31 August 2020	138	138
SAHYOG: Guidance for Mental Well-being of Children	04 May 2020 to 31 August 2020	120	60
NISHTHA – Integrated teacher training	31 July 2020 to 31 August 2020	28	28
Total		1379	1046

September 2020 to March 2021 on PM eVidya 12 DTH-TV channels

Content Coverage	Telecast (From – To)	No. of Live Programmes	Hours of Telecast
Class I to X	01 September 2020 to March 2021	584	292
Class XI and XII	01 September 2020 to March 2021	52	52
Webinar on ICT tools	01 September 2020 to March 2021	147	147
SAHYOG: Guidance for Mental Well-being of Children	01 September 2020 to March 2021	147	73.5
NISHTHA – Integrated teacher training (completed in September 2020)	01 September 2020 to March 2021	04	04
3030 STEM season 2 with Prof. Manish Jain, IIT-Gandhinagar	March 2021	03	03
Teaching-learning intervention inclusive classrooms	March 2021	07	3.5
Total		944	574

There were a total of 2323 live programmes for 1621 hours from April 2020 to March 2021. Overall, 584 episodes of live telecast from Classes I to X channels have been transmitted covering 292 hours of telecast. For Classes XI and XII, one hour weekly live telecast has been arranged and till March 2021, 52 episodes have been covered in this series. Additionally, a Webinar Live Interactive Session on ICT tools was scheduled. The Webinar intends to cover various themes related to Educational Technology (ET) and Information and Communication Technology (ICT) in education. The webinar encompasses topics related to creation and dissemination of e-Contents, Content-Pedagogy-Technology integration, use of ICT in teaching-learning and assessment, OER, use of various ICT tools, creation of AR/VR contents, mobile



app and AI based platforms, etc. Being a premier institution working in the field of ET and ICT for school education and teacher education, CIET invites the learners to join the Webinar, which is held on all weekdays (Monday to Friday). This series of interactive sessions will hopefully be a stepping stone in the enhancement of knowledge and skill of those working in the field of education. Besides, 'SAHYOG: A Guidance and Counselling Session for Mental Health and Well-being of Students, Teachers and Parents' is also scheduled on weekdays. From September 2020 to March 2021, 147 webinar sessions on ICT tools and SAHYOG counselling sessions each have been conducted live.

Online or Offline Review of e-Content

A total of 11,210 e-Content were reviewed in online or offline review workshops from April 2020 to March 2021. Following are the details of e-Content reviewed:

S.No.	Organisation Name	Total videos reviewed from April 2020 to March 2021
1.	Assam State DTH	444
2.	Jammu and Kashmir State	31
3.	Haryana State	598
4.	Karnataka State	157
5.	Punjab State	2225
6.	Maharashtra State	197
7.	Uttar Pradesh State	1410
8.	RIE Ajmer	317
9.	RIE Bhopal	279
10.	RIE Bhubaneswar	551
11.	RIE Mysuru	347
12.	NERIE, Shillong	93
13.	Rotary India Literacy Mission	1681
14.	Graphic Novels	317
15.	CIET	1164
16.	ISL (Indian Sign Language) content developed at CIET	0
17.	PSSCIVE, Bhopal	32
18.	Massive Open Online Course (MOOC) content reviewed at CIET	8
19.	SE Shagun	964
20.	IIT Gandhinagar	16
21.	IISc Bangalore	24
22.	National Institute of Open Schooling	40
23.	NVS	38
24.	Senscilen Interactive Pvt. Ltd.	31



25.	Society for All Round Development	12
26.	Teachers of Bihar	31
27.	ICT Awardee	40
28.	Shikshit Haryana and Arpan	10
29.	B.A. B.Ed. for RIE Education Student	10
30.	Sri Sathya Sai Vidya Vihar	5
31.	Karpagam Academy of Higher Education, Coimbatore	8
32.	University Teachers Association	130
Total		11,210

e-Resources for School and Teacher Education (Augmented Reality – Virtual Reality)

Various kinds of e-resources like illustrations, animations, graphics, infographics, etc., are developed under this programme. A total of 16 Augmented Reality digital contents and 16 videos on Science textbook for Classes IX and X have been developed this year. Also, 65 digital illustrations have been developed for stories and poems based on *Rimjhim* textbooks of Classes I to V and 12. Digital illustrations have been developed based on *Rimjhim* textbooks of Classes I–V for stories for video production.

ICT in Education Courses for Teachers and Students

Curricula for ICT in Education for School System includes the training structure and content methodology to be followed by States or UTs or organisations. For students, the content is organised year-wise and for teachers, the content is organised as induction and refresher courses. This year the course outline was developed for Refresher 1 (ICT-Pedagogy Integration), Refresher 2 (Development of e-Content) and Refresher 4 (Open Educational Resources). A training package on ‘Development of e-Content’ for a virtual training has been developed. A total of 173 video tutorials are developed based on Year 1 and Induction 1 course content of ICT in Education Curriculum. In collaboration with the Ministry of Electronics and Information Technology (MeitY), an online course on ‘Environmental Hazards of Electronic Waste’ (e-waste) was developed. A cyber safety guideline has been launched for parents in English and Hindi. Also, in collaboration with ISEA, CDAC, Hyderabad, three courses on Cyber Hygiene have been developed. Translation and review workshop was conducted from 22–26 March 2021 and the following books were translated, reviewed and edited: *Games Booklet* (English), *Mobile Apps in Education* (English and Hindi), *ICT Award Book* (English), *Cyber Safety and Security* (English and Hindi) and *Induction 1* (Hindi). Review workshop was conducted from 18–20 March 2021 to review the Cyber Safety Courses developed in collaboration with ISEA-CDAC, Hyderabad. First level meeting for developing curriculum and syllabus for ICT Education in Tamil Nadu has been initiated and the States have given the commitment to develop the syllabus.



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

Digital Resources (Video films) on Different Topics of Job Roles in Various Sectors

Digital resources including video films and PowerPoint presentation on different topics of job roles in various sectors for Classes IX and XI have been developed. About 41 video films in the sectors of Agriculture; Apparel, Made-ups and Home Furnishing; Telecom; Plumbing; Retail; Electronics; Automotive and Health Care have been developed and uploaded on the website for online access of teachers and students.

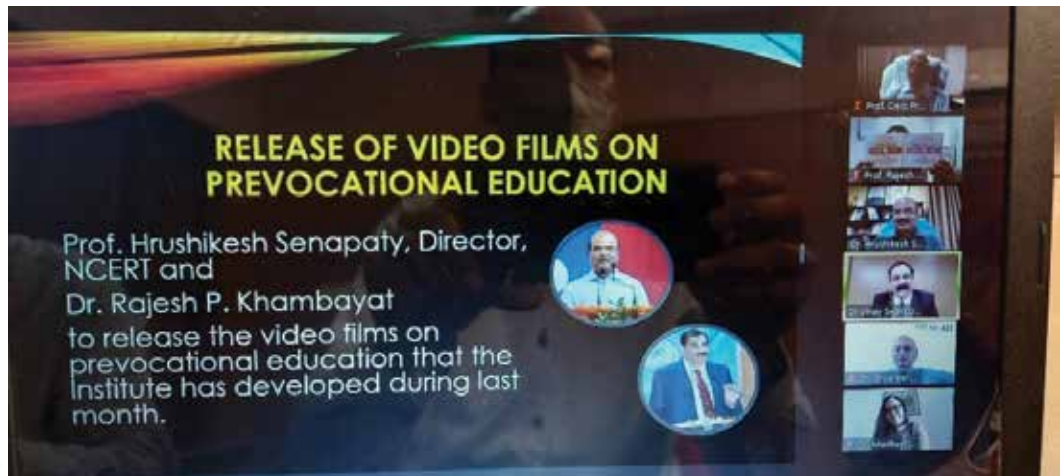


Short Video films for Pre-vocational Courses

Video films on pre-vocational courses for the PM’s eVidya Channel for multimode access to digital or online education has been developed. About 41 pre-vocational video films were developed and released for Classes VI to VIII in Agriculture; Apparel, Made-ups and Home Furnishing; Bakery; Plumbing, Beauty and Wellness; Retail and Health Care.

Digital Resources Video Scripts for Vocational Subjects — Store Operations Assistant for Class X

Three working group meetings (WGMs) for the development of digital resources video scripts for vocational subjects were organised. In these WGMs, experts from retail and technical field and PSSCIVE faculty were involved to develop



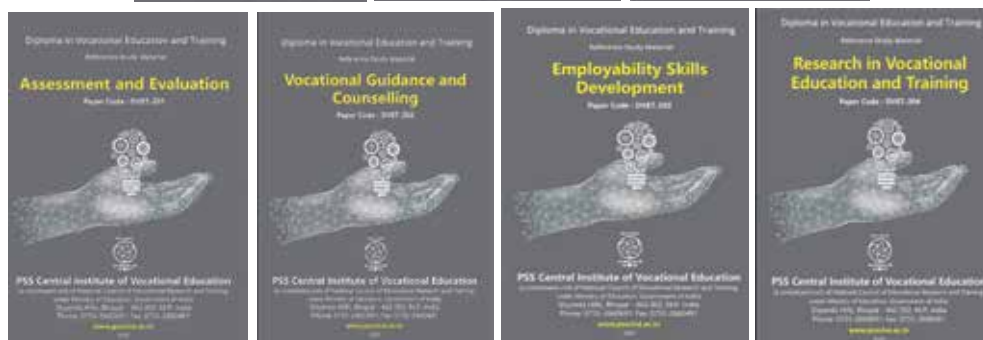
30 video scripts for *Store Operations Assistant*, textbook of Class X. Video scripts were developed on the topics — customer relationship management, difference between CRM and e-CRM, customer retention, communication process, customer expectations; support to meet customer expectations, effective communication, selecting the most appropriate way of communication, review and maintain customer service delivery, procedure and systems for delivering customer service, recording of customer service information, legal requirements for storage of data, improvement in customer service, mechanism for implementation of changes, promote continuous improvement, changes in service counter, handling repeated customers' problems, identifying and listening to customers' problems, negotiate to reassure customers, importance of feedback, organisational procedure to deal with customers, teamwork, team aims and targets, employees' rights and responsibilities and effective work habits. Twenty audio scripts related to *Sales Associate*, textbook of Class XII, have also been developed.

Student Textbooks on Different Job Roles under Apparel, Made-ups and Home Furnishing Sector

Two WGMs for review and finalisation of student textbooks of different job roles under Apparel, Made-ups and Home Furnishing Sector have been organised in which academicians, representatives from the Industry and freelancers reviewed the textbooks on the job roles, viz., Inline Checker, Assistant Fashion Designer, Store Keeper, Embroidery Machine Operator, Export Assistant and Packer.

Modules on Diploma in Vocational Education and Training (DVET) through the Distance Mode

The second session of Diploma in Vocational Education and Training (DVET) through the distance mode is being conducted with an enrolment of 39 students from all over the country. The modules DVET-101 — Vocational Education and Training System, DVET-102 — Curriculum Development Implementation



and Evaluation, DVET-103 — Instructional Design and Development, DVET-201 — Assessment and Evaluation, DVET-202 — Vocational Guidance and Counselling, DVET-203 — Employability Skills Development, DVET-204 — Research in Vocational Education and Training have been finalised.

Guidelines, Modules and Videos for Pre-vocational Education for Classes VI to VIII

Guidelines for Pre-vocational Education for Classes VI to VIII have been developed. A module on Pre-vocational Education under the School Leadership Programme has also been developed and implemented through the NISHTHA programme. The institute released three video films for introducing Pre-Vocational Education for NISHTHA programme (online portal) which were used for the training of SRGs and Teachers for introducing the pre-vocational education programme from Classes VI to VIII across the country. The institute also developed 37 videos on pre-vocational education activities for PM eVidya channel. Sessions on *Kishore Manch Channel* for promoting pre-vocational Activities were conducted based on suggested activities in the *Alternative Academic Calendar* of the Upper Primary Level every Sunday from 12.45 pm to 1.30 pm during the year 2020–21.

Guidelines on On-the-Job Training for School Students

The guidelines on On-the-Job Training (OJT) for systematic implementation of OJT of vocational students in schools have been published. The guidelines document developed will help the schools to implement formal OJT systematically. It will also serve as a general checklist and benchmark to organise OJT by vocational teachers or trainers for students enrolled in vocational subjects in schools.

Guide and Brochure on Diploma in Vocational Education and Training

A programme guide and a Brochure on Diploma in Vocational Education and Training (DVET) (Distance Mode) has been prepared by faculty members along with experts through working group meeting. It contains details about the DVET programme, admission requirement, programme structure and the syllabus of all papers. This is a one-year programme divided into four trimesters. This programme contains 10 papers including two elective papers along with internship and project work. This programme covers pedagogy, ICT applications and vocational courses. This programme is basically meant for preparing vocational teachers.

Quarterly Bulletin on Vocational Education

A combined issue of Quarterly Bulletin on Vocational education for the period October 2019 to March 2020 has been published. The bulletin comprises the events and activities organised in the institute and other important activities during the period.

REGIONAL INSTITUTE OF EDUCATION (RIE), AJMER

e-Resources for School and Teacher Education Curriculum and Management of Studio at RIE, Ajmer

Audio-video contents under PM eVidya digital education programme have been developed for Classes II, VI (all subjects) and XI–XII (Physics and Chemistry)



in the session 2020–21. A total of 283 e-Contents (audio-video) for Classes II, VI, XI and XII (Chemistry) have been developed.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHOPAL

Integration of TPACK (Technology, Pedagogy and Content Knowledge) in Science at the Upper Primary Level

The development of TPACK Package was done in two phases— a script writing workshop and a five-day workshop for material development. The TPACK Package covers the subjects viz., biology, chemistry and physics at the upper primary level.

Certificate Programme in Communication Skills in English for the Western Region

The certificate course in communication skills was proposed with the objectives to upgrade and enhance the communication skills of the teachers teaching at the school level. The programme is to be offered in blended mode for a span of three months. The module of the course comprises 10 modules, viz., Communication, Listening, Speaking, Reading, Writing, Vocabulary, Grammar, Non-verbal Communication, Soft Skills, and Technology and Communication with four units each, making it a 40-unit course with hands-on activities spread throughout the material. Relevant exercises are also given at the end of each unit for the perusal of the learners.

Certificate Programme in English Core for Class XII through MOOC

The course Annual Preparatory Programme for Enhancement in Academics and Revision (APPEAR) in English for the learners of Class XII has been developed. APPEAR (English) is a self-learning, revision and preparatory programme for Class XII students of English Core from CBSE curriculum to bridge the gap of face-to-face learning due to COVID-19 and to improve their learning outcomes. The objectives of the course are to comprehend the content of NCERT textbooks and help learners develop language skills. The course is prepared by national experts from National Institute of Education–Delhi, Regional Institute of Education, English and Foreign Languages University, Kendriya Vidyalaya Sangathan, ZIET, MANIT, GITAM, BGU and other leading organisations in the field of education. It is divided into two phases, each phase consisting of 20 modules. The modules of the course have been structured to suit the learning needs of Class XII. Interesting and interactive activities along with e-text, audios, videos and web resources will help the learners master the content and help them perform well in Board Examinations. The course is currently running on the SWAYAM portal by CIET at www.swayam.gov.in/NCERT. More than 1,600 learners, including students and teachers, are getting benefit from the course.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Learning Resource Centre for In-service and Pre-service Teacher Education Programme

The programme is designed for the development of educational resource centre to provide hands-on experiential learning to in-service and pre-service teachers. The centre is also used for the learning activities of DM School students. Under the programme, three activities viz., development of



an Educational Resource Room, where 150 activities are included for use in teacher education and teacher training programmes; development of a herbal garden, in which 200 medicinal plants are grown with their nomenclature plates; and a theme park, where nine theme based models are installed in open space for use by the DM School and RIE, Bhubaneswar, are being undertaken.

Diploma Programme in Science Education (DPSE)

The resource materials comprising eight theory modules, one practical manual, one project guide, one programme guide and one contact programme guide have been developed for conducting two semester DPSE in blended mode. Each module consists of six units and carries two credit points. The total credit points are 36 for Diploma Programme in Science Education, which is to be executed from the next academic year.

Production of e-Resources for School Curriculum and Teacher Education Curriculum

During the year 2020–21, 550 e-Content programmes were produced, which includes 400 programmes for PM eVidya for Classes V and IX and 150 programmes on different subjects for Odisha state government schools. Also, 51 live classes have been telecast from ICT Studio, RIE, Bhubaneswar (SAHYOG-20, NISHTHA-06 and PM eVidya Channel-25).

Institutional Repository of Regional Institute of Education, Bhubaneswar

The Institutional Repository of the Regional Institute of Education, Bhubaneswar, was started in 2019–20. It is an online archive for collecting, preserving and disseminating digital copies of the academic output of the institution. The main objectives of the repository are to promote wider access and visibility of research outputs of RIE, Bhubaneswar, and to preserve the publications of the institute digitally for long-term access. During the year 2020–21, around 450 documents were uploaded in the repository.

Exemplar Items in Language, Social Science, Science and Mathematics at the Secondary Level

The programme aimed at preparation of exemplar items in languages, social science, science and mathematics at the secondary stage. It was prepared for the use of students as well as classroom teachers at the secondary level. As per discussion in the workshop, MCQs have been developed with clear focus on the learning outcomes of Classes IX and X. More than 280 exemplar items in English and Hindi languages, Social Science, Science and Mathematics have been developed.

Teaching Learning Material on Spoken English for Teachers teaching in Early Primary Grades of Odisha

Teaching-learning material on spoken English for teachers teaching early primary grades in Odisha has been developed. The material are based on learning outcomes, English speaking, listening, reading and writing skills.

REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

e-Resources for School and Teacher Education Curriculum

The project was conducted to create and utilise a network of e-Resource developers viz., teachers, teacher-educators and students in developing e-Resources for school and teacher education curriculum; enable the faculty



members and students of RIE, Mysuru, to produce audio, video and digital resources using the studio of the institute as well as Free and Open Source Software (FOSS), enrich technologically, review and finalise e-resources and deploy digital resources on NROER and other online platforms like DIKSHA web portal. The videos were also telecast on PM eVidya DTH channels. A total of 281 video lessons were produced for all subjects of Class IV and Class VIII under PM eVidya till March 2021.

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

Sustainable Development Goals (SDGs) Module for Secondary Level for Key Resource Persons of North Eastern States

The specific objective of this programme was to develop a module based on sustainable development goals for key resource persons at the secondary stage, which is specific to North-Eastern States. The module contains the innovative practices carried out by the States of Manipur, Mizoram, Nagaland and Tripura in light of SDGs 2030, with special reference to goal number four. Some case studies conducted in this area have also been included.

e-Resources for School and Teacher Education Curriculum

The main objective of the programme is production of audio, video and digital resources by utilising the studio set-up and deploying digital resources on NROER/SWAYAM/SWAYAM PRABHA. The NERIE is equipped with a functional studio, similar to the facilities available in other RIEs. During the year 2020–21, around 30 videos have been developed in Science, Social Science, Languages, Mathematics, etc., for different classes from primary to secondary stage. Few videos have also been developed for the pre-primary stage. The videos developed under the programme were first reviewed by an internal review committee in NERIE and sent to the CIET after correction. Some of the videos were scheduled for telecast on SWAYAM PRABHA. The video titled 'Nitrogen Cycle' was nominated in the VP-DW Manthan Category of the 10th edition of the National Science Film Festival of India (NSFFI) organised by *Vigyan Prasara* scheduled from 24 to 27 November 2020.

Dynamic Website for tracking of Programmes, creating Programme Database, and Sharing and Feedback Mechanism

The objectives of the programme were to build a mechanism for tracking all programmes conducted by the NCERT, create a sharing and feedback mechanism about the programmes for all stakeholders, create e-Database of programmes conducted by NCERT, provide a platform to States to upload the details of the programmes conducted by the States and maintain and operate the website.

The NIC, Meghalaya has been entrusted to develop the Programme Management Information System (PMIS). The PMIS website was inaugurated by the Hon'ble Minister of Education, Ramesh Pokhriyal 'Nishank', and Lahkmen Rymbui, Hon'ble Minister of Education, Meghalaya, on 14 February 2020 at a function in North Eastern Hill University, Shillong. The PMIS is linked with the NERIE website (<http://nerie.nic.in/>) and will run for a few months for NERIE on pilot basis for fixing bugs. It is being constantly tested and bugs are



reported to NIC, Meghalaya, for further improvement. The PMIS is currently at its initial phase, which needs an upgradation to incorporate some more features like pre-service programmes.

Handbook on Experiments and Learning Outcomes in Science at the Secondary Level

The objectives of the programme were to help teachers understand and achieve the learning outcomes as per the curricular expectations and for assessing the learning outcomes through experiments, providing practical experience in using contextual resources to create learning situations in the classroom and enhancing the competency of the teachers in conducting experimental learning as a pedagogical process across the curricular areas. One hundred experiments from the *Lab Manuals of Science*, Classes IX and X, NCERT were finalised based on the importance and relevance of the content. The Handbook covers all activities of Classes IX and X along with the learning outcomes and assessment criteria.





6. Capacity Building Programmes

With a view to reduce gaps that exist between the curricular pronouncements and the ground realities, the NCERT organises capacity building programmes for the stakeholders of education. The Council organised a mega capacity building programme 'NISHTHA' for the capacity building of teachers and school heads at the elementary level on learner-centred pedagogies to improve the learning outcomes of students. Due to the COVID-19 pandemic situation, the NISHTHA programme was converted into online mode. Eighteen generic and subject specific pedagogy modules were used for the online training programme. The Council conducts capacity building or orientation or training programmes for master trainers or key resource persons for ensuring quality education at all levels of school and teacher education. During the year, the Council conducted the programmes via the virtual mode in the areas of school health and wellness, guidance and counselling, vocational education, vocational pedagogy and employability skills, research methodology, global citizenship education, educational kits, contextualisation of curriculum, waste management, setting up of maths lab, science, social science and mathematics, language, inclusive education, textbook development, ICT, etc.

DEPARTMENT OF ELEMENTARY EDUCATION

MOOC on Pedagogy of Environmental Studies

In the second cycle (2020–21) of the MOOC on Pedagogy of Environmental Studies, 14,647 candidates were enrolled. Course material was uploaded on the SWAYAM Portal of online course. A discussion forum was organised to facilitate peer learning. Each unit was supplemented by Formative and Summative assessment for self-evaluation and at the end of the course, a summative assessment was conducted. The participants who scored more than 40 per cent received e-certificates. Their queries were answered timely through e-mail for better conduction of the course. The feedback of the participants was obtained throughout the year and majorly at the end of the course.

DEPARTMENT OF EDUCATION IN LANGUAGES

National Workshop on Pedagogy and Material Development in Urdu Language Education at the Secondary Stage

The programme was organised from 11 to 15 March 2021 with the aim to develop material on pedagogy and assessment in Urdu language at the secondary stage so that the quality of school education may be improved. Twenty-eight experts and teachers participated in the workshop and presented their views followed by discussions.

A national workshop on pedagogy and material development in Urdu language education at the secondary stage was organised.

The themes of the different sessions were:

- ❑ Education policy and language
- ❑ Foundational literacy and numeracy
- ❑ Acquisition of language skills in Urdu
- ❑ Concept of first, second and third language learning
- ❑ Virtual teaching strategies for Urdu language
- ❑ Teaching of different forms of Urdu literature in classrooms
- ❑ Mother tongue based multilingualism and Urdu language teaching learning
- ❑ Development of e-content in Urdu language assessment and learning outcomes
- ❑ Availability of teaching-learning material in Urdu

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES

The department organised in-service training programmes for PGTs in the domain of Geography. The programme focused on integrating new and emerging concerns in the subject area along with important concerns of NEP 2020, for example, integrated approaches and greater thrust on participatory pedagogical methods in the teaching and learning processes. The National Population Education Programme (NPEP) of the Department had organised training programme for Key Resource Persons in the area of health and wellness under the aegis of *Ayushman Bharat* programme of the Government of India. It was a collaborative initiative with the Ministry of Health and Family Welfare.

S.No.	Title of the Programme	Venue and Date
1.	Refresher Course for PGTs in Geography	DESS, NCERT, 1–18 March 2021
2.	School Health and Wellness Training Programme under <i>Ayushman Bharat</i>	NCERT – Online 6–11 August 2020
3.	School Health and Wellness Training Programme under <i>Ayushman Bharat</i>	NCERT – Online 25–28 August 2020
4.	School Health and Wellness Training Programme under <i>Ayushman Bharat</i>	NCERT – Online 15–18 September 2020
5.	School Health and Wellness Training Programme under <i>Ayushman Bharat</i>	NCERT – Online 20–23 September 2020
6.	School Health and Wellness Training Programme under <i>Ayushman Bharat</i>	NCERT – Online 25–28 September 2020

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Online Diploma Course in teaching of Science at the Upper Primary Stage

An online course for teachers teaching science at the upper primary stage has been developed and is being run on the MOOC platform. The aim is to empower a large number of teachers, who require strengthening of content as well as pedagogic knowledge.

An MOOC platform (<http://www.ncertx.in>) using the “Open edX” has been set up. The four quadrants highlighted in SWAYAM have been fully incorporated in this course in an integrated manner. During the year 2020–21, around 2500 teachers across the country have enrolled in this course. Further details about this course are available at www.ncertx.in or one can write to us at ncertx@gmail.com.



DEPARTMENT OF CURRICULUM STUDIES

The *National Education Policy (NEP) 2020* envisages the education system that promotes learners’ real understanding and learning how to learn. The entire thrust, therefore, is on making classroom sessions holistic, integrated, enjoyable and engaging. It also mentions that the ideas, abstractions and creativity indeed best flourish when learning is rooted in the localised context. All curriculum and pedagogy, from the foundational stage onwards, is emphasised to be strongly rooted in the Indian and local context and ethos in terms of culture, traditions, heritage, customs, language, philosophy, geography, ancient and contemporary knowledge, societal and scientific needs, indigenous and traditional ways of learning, etc. Capacity building programmes for teachers and teacher-educators are essential to acquaint them with the processes of adoption and adaptation of NCERT textbooks or other teaching-learning resources. Keeping this in view, a capacity building programme was organised through the virtual mode for strengthening the capacity of teachers and teacher-educators in contextualisation of teaching-learning process from 15 to 19 March 2021. A total of 60 participants from two States, namely Nagaland and Mizoram, participated in the programme.

Details of Training or Orientation or Capacity Building Programmes organised

Title of the Programme	Venue and Date
Capacity Building of Teacher-educators and Teachers on Contextualisation of Curriculum in Languages, Mathematics, Science and Social Sciences at the Upper Primary Stage	Virtual mode 15–19 March 2021

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

Diploma Course in Guidance and Counselling (Blended Mode)

The diploma course aims to train teachers, teacher-educators, educational and guidance personnel to work as teacher counsellors in schools or related settings. The Diploma Course in Guidance and Counselling for the 2020 session began in January 2020. The first phase of distance learning comprised monthly tutorials, completion of assignments and development of portfolios. The second phase, i.e., three months' contact programme was conducted via the online mode due to the COVID-19 pandemic situation. It involved intensive and supervised virtual school practical in different topics, i.e., group guidance, psychological assessment, career information, career development and counselling, online classes and special lectures for skill development. Written examinations were also held through Google Form in online mode followed by *viva-voce*. Internship projects of the trainees were conducted for three months. On successful completion of the course, diploma certificates were awarded to 50 trainees. The new session for the year 2021 began in January 2021 with 44 participants.

Details of Training or Orientation or Capacity Building Programmes organised

S.No.	Title of the Programme	Venue and Date
1.	Diploma Course in Guidance and Counselling (Blended Mode) 2020	NIE, New Delhi 1 January 2020 – 31 December 2020
		Tutorials were held on 30 and 31 January 2020 27 and 28 February 2020 30 and 31 March 2020 16 and 17 April 2020 13 and 14 May 2020

DIVISION OF EDUCATIONAL RESEARCH

Capacity Building on Qualitative Research Methodology for Academic Faculty of NCERT, SCERTs and IASE

A workshop on Qualitative Research Methodology for Academic Faculty of NCERT, SCERT and IASE was conducted from 14 to 17 December 2020 through the online mode. A total of 30 faculty members of these institutions participated in the workshop. The details of qualitative research methodology were discussed. In addition, the participants also identified a research topic and developed a draft of the research proposal, which was thoroughly discussed in the workshop.

DEPARTMENT OF TEACHER EDUCATION

Induction Programme for Newly Recruited Teachers of Demonstration Multipurpose Schools (DMS)

An Induction Programme for newly recruited Demonstration Multipurpose School (DMS) teachers was organised from 4 to 7 August 2020. Teachers from DMS Ajmer, Bhopal, Bhubaneswar and Mysuru participated in these four days' Induction Programme through the online mode.

The major objectives of the induction programme were to make them aware of the structure, role and functions of NCERT and its constituent units; enable them to have a better understanding of the emerging issues in the area of school education; provide an understanding of the issues and concerns emerging from the *National Curriculum Framework 2005* and its implementation as well as recommendations of NEP 2020 and strengthen their capacity to undertake teaching, research and other academic activities. Various themes, such as familiarising the roles, functions and activities of different constituent units of NCERT; the roles, functions and activities of NIE departments and the role of DMS teachers in contributing in the functions of different departments were discussed during the Induction Programme.

NISHTHA Integrated Teacher Training Programme for Elementary Teachers of DMS

The NISHTHA integrated teacher training programme was organised for the elementary teachers of Demonstration Multipurpose Schools of NCERT from 21 August to 26 November 2020 through the online mode. Sixty-five teachers from the DMS attended the programme and completed the online quiz related to all the modules. Every alternate day, there was an online interaction with NRG members about the modules and different activities. Participants from different DMS presented their group activities. The activities under online NISHTHA programme included live interaction, module-based quiz, group works and presentations by the group participants, submission of portfolio, etc.

Professional Development Course for NCERT Faculty

Professional development is an essential pre-requisite for updating and strengthening of capabilities through furthering insights in the ascribed operational areas. In a broad perspective, professional development results in shaping persons to be of greater use to the organisation for which they work by strengthening their knowledge, skills, practices and attitudes. In this regard, the NCERT, which is a multi-institutional (Units) and multi-departmental organisation, provides opportunities to the faculty for their professional growth. The Department of Teacher Education organised the 8th Orientation-cum-Refresher Course (OCR) from 28 December 2020 to 18 January 2021 through the online mode. A total of 26 faculty members from NCERT Constituent Units and six faculty members from SCERT, Sikkim, participated in this programme. The main focus of the eighth OCR was — discussion on different themes under School Education based on NEP 2020 recommendations. There were theme presentations by experts followed by discussion, panel discussion by external experts, and panel discussion by the participants during the programme.

Dissemination of Learning Outcomes at the Secondary Stage through Regional Meetings

The document 'Learning Outcomes for the Secondary Stage' was prepared by the NCERT and launched by the Hon'ble Minister of State, MHRD, Shri Sanjay Dhotre, on 23 December 2019. The Learning Outcomes were prepared for the subjects — English, Hindi, Sanskrit, Urdu, Science, Social Science, Mathematics, Art Education and Health and Physical Education. For wider dissemination of the document to the stakeholders and develop an understanding in using the document, as proposed in the programme, five regional workshops were organised in all States and UTs.

Five workshops were conducted using Google Meet platform for North East, West, South and North Eastern regions. The document was shared with the stakeholders and the main features of the documents were apprised to all participants. The members from SCERTs, State Board, NISHTHA KRPs, and State Coordinators from RIEs participated in the regional meet. The States and UTs that participated in these meetings include: Chhattisgarh, Goa, Gujarat, Madhya Pradesh, Maharashtra, Dadra and Nagar Haveli, Daman and Diu, Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, Chandigarh, Bihar, Jharkhand, Odisha, West Bengal, Andaman and Nicobar Islands, Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, Lakshadweep, Puducherry, Assam, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim and Tripura.

S.No.	Region	Date	States
1.	West	18–20 August 2020	Chhattisgarh, Goa, Gujarat, Madhya Pradesh, Maharashtra, UTs of Dadra and Nagar Haveli, and Daman and Diu
2.	North	26–28 August 2020	Delhi, Haryana, Himachal Pradesh, Jammu and Kashmir, Punjab, Rajasthan, Uttar Pradesh, Uttarakhand, and UT of Chandigarh
3.	East	28 September – 1 October 2020	Bihar, Jharkhand, Odisha, West Bengal, UT of Andaman and Nicobar Islands
4.	Southern	6 October 2020	Andhra Pradesh, Karnataka, Kerala, Tamil Nadu, Telangana, UTs of Lakshadweep and Puducherry
5.	North East	2–3 December 2020	Assam, Arunachal Pradesh, Meghalaya, Mizoram, Manipur, Nagaland, Sikkim and Tripura

CAPACITY BUILDING PROGRAMMES

Two capacity building programmes for teacher–educators and curriculum developers in States and UTs were conducted. In these programmes, concepts, such as curriculum research areas and methodologies of curriculum research were discussed with the participants. Participants from each State/UT along with the faculty members from NCERT identified one curriculum research area concerning with the States and UTs, for example, teaching-learning of science, social science, mathematics, languages, problems of Children with Special Needs (CWSN), problems related to learning outcomes, etc., and will be conducting these researches with the States/UTs.

Research proposal along with the tools for conducting research in the States and UTs were finalised during the workshop and a team of faculty members from NCERT and States/UTs will take up these researches. Nineteen research proposals have been finalised for conducting curriculum research in 19 States and UTs.

Details of Training or Orientation or Capacity Building Programmes organised

Title of the Programme	Venue and Dates
Capacity Building and Handholding of Teacher-Educators and Curriculum Developers from SCERTs and DIETs on Curriculum Research in the States/UTs (19 States/UTs participated)	Virtual Meeting 29–30 September 2020
	Virtual Meeting 22–23 March 2021

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Online Certificate Course in Action Research in Educational Technology

The online course in Action Research in Educational Technology is especially developed for the teacher-educators at elementary level working in District Institutes of Education and Training (DIETs), different State Councils of Educational Research and Training (SCERTs) and State Institutes of Education (SIEs). The Online Course is the first-of-its-kind with a purpose to help teacher-educators conduct Action Research to address their educational problems. The course also aims at assisting them in conducting in-service Teacher Professional Development (ITPD) in Action Research. The Course shall provide conceptual understanding into the processes of Action Research. The participants shall be required to prepare a proposal on Action Research in their respective areas of work.

On 1 December 2020, the 10th cycle of courses on Online Action in Educational Technology was started with 160 candidates. Online synchronous meetings were conducted on a regular basis to resolve the issues and doubts raised by participants; 139 candidates completed the course.

Rollout of ICT and Pedagogy Integration Curriculum in States and UTs

Courses under ICT in education curriculum are implemented in States/UTs under *Samagra Shiksha* to enable teachers to use technology in the classroom. Induction 1 course was implemented in Karnataka and 11,481 teachers have been trained and certified. Around 290 sessions were conducted as a part of Webinar for various stakeholders on ICT tools. Online courses were conducted for ICT awards and 65 awardees were awarded with Induction 1 certificate and 27 awardees were certified for Refresher 1 course on 'ICT Pedagogy Integration in Teaching Learning and Assessment'. Virtual workshop on 'Development of e-Content' was conducted in two phases for State Resource Groups (SRGs) of 36 States/UTs and around 750 participants were trained. Virtual training was also attended by 2000 teachers of Punjab through *YouTube*. Workshops on e-Content development were conducted for the participants from Chandigarh. On the occasion of Safer Internet Day, a panel discussion was conducted and an online quiz was also launched on 13 February 2021. Around 35,938 participants attempted the quiz, out of which, 19,505 were certified on 'Safer Internet Day Awareness Quiz'.

Professional Development of NCERT Faculty on ICT in Education

A training programme was conducted through the virtual mode on 'Assessment using Google Forms' on 7 May 2020. The faculty were oriented on developing

taxonomy for capacity building of teachers. A session on Conducting Online Classes using Google Meet and a web-based training on cyber safety and security was also conducted through *YouTube* for NCERT faculty.

Model for ICT Integrated School System

A school collaboration project was initiated with MASHAV, Israel, at DMS, Mysore and Bhubaneswar. As part of the project, students of DMS and students from schools in Israel participated in collaboration projects and have had Live interaction to share and understand the various cultural perspectives and also improve their ICT competencies. As part of the course, classes were held on assessment using Google Forms and online classes using Google Meet were conducted. A web-based training on cyber safety and security was conducted for DMS teachers. Need-based support was provided to DMS teachers on using technology during remote teaching and learning during the pandemic.

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

Internship in ICT for M.Ed. students from Jamia Millia Islamia, Amity University, and Regional Institute of Education, Bhopal, was organised during the session via blended and online mode.

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

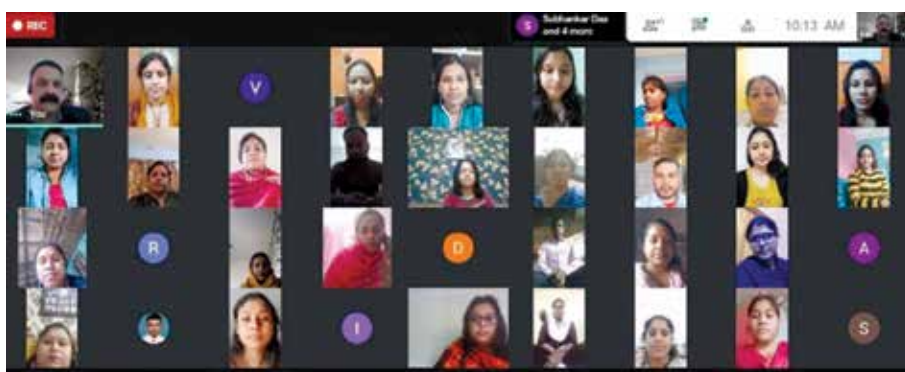
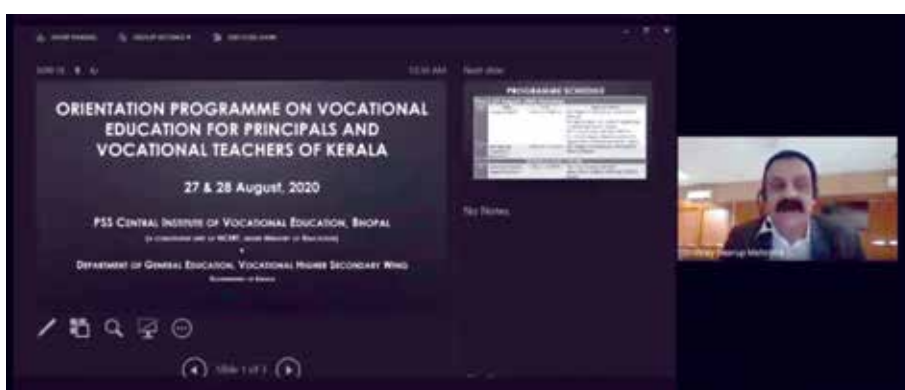
In all, 32 training programmes were organised by the institute, which were of three types: (i) Orientation Programme — Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools, (ii) Training Programme — Training Programmes for developing Master Trainers on Vocational Pedagogy and Employability Skills and (iii) Teacher Training — Teachers' Training on different Vocational Subjects (Job Roles) implemented under *Samagra Shiksha*.

Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools

Ten orientation programmes were organised via the virtual mode for the Principals, Additional District Project Coordinators, DEOs and other stakeholders to strengthen vocational education and training in schools for the States and UTs of Tamil Nadu, Karnataka, Andhra Pradesh, West Bengal, Uttar Pradesh, Uttarakhand, Madhya Pradesh, Maharashtra, Delhi, Gujarat, Punjab, Bihar, Rajasthan, Chhattisgarh, Himachal Pradesh, Chandigarh, Jammu and Kashmir, Kerala, Goa, Telangana and other Southern States, and North Eastern States. The participants were acquainted with various aspects of the implementation of vocationalisation of secondary and higher secondary education under *Samagra Shiksha* and with the roles and functions of the Principals in the effective implementation of vocational education. Presentations were made on the roles and functions of 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 skill development schemes, including vocational education in schools under *Samagra Shiksha*. The participants were informed about the various recommendations on

vocational education made by the Committee constituted by the MoE, Government of India, for the development of *New Education Policy 2020*. 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, occupation-based vocational subjects offered from Classes IX to XII, the structure and implementation of learning outcomes based vocational curriculum, various modules in the curriculum of employability skills, domains of learning, vocational pedagogy, teaching-learning, e-learning and skill assessment and evaluation of students were discussed in various sessions. The online orientation programmes were attended by 1543 key functionaries from various States.

The orientation programmes for key functionaries of States and UTs on strengthening VET in schools organised during the year is given below.



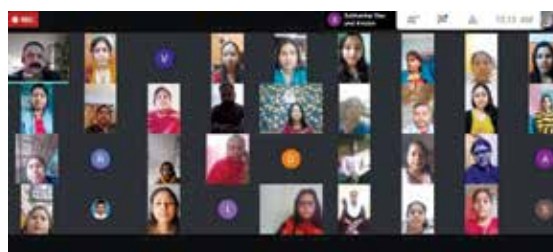
Orientation programme for key functionaries to strengthen vocational education and training in schools

S. No.	Title of the Programmes	Dates and Venue (in virtual mode)
1.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools	14-18 September 2020
2.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools	21-25 September 2020

3.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools	12–16 October 2020
4.	Orientation Programme for the Key Functionaries to strengthen Vocational Education and Training in Schools of Tamil Nadu, Karnataka, Andhra Pradesh and West Bengal	09–13 November 2020
5.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools of Madhya Pradesh and Maharashtra	02–06 November 2020
6.	Orientation of Additional District Project Coordinators and DEOs on Implementation of Vocational Education in Schools under NSQF for the States of Delhi, Punjab, Gujarat and Arunachal Pradesh	07–11 December 2020
7.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools for the States of Rajasthan and Chhattisgarh	23–27 November 2020
8.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools of Chandigarh, Himachal Pradesh, Jammu and Kashmir and NE States	14–18 December 2020
9.	Orientation of Additional District Project Coordinators and DEOs on Implementation of Vocational Education in Schools under NSQF	07–11 December 2020
10.	Orientation Programme for Key Functionaries to strengthen Vocational Education and Training in Schools of Odisha	15–19 March 2021

Training Programmes for developing Master Trainers on Vocational Pedagogy and Employability Skills

The institute organised ten programmes for developing master trainers on vocational pedagogy and employability skills via the virtual mode for teachers of Arunachal Pradesh, Tripura, Meghalaya, Manipur, Madhya Pradesh, Chhattisgarh, Maharashtra, Rajasthan, Puducherry, Odisha, Kerala, Tamil Nadu, Andhra Pradesh, Karnataka, Goa, Punjab, Jammu and Kashmir, Himachal Pradesh, Haryana, Bihar, Delhi, North Eastern States and Southern States. The master trainers were trained to develop pedagogical skills for improving teaching-learning in schools and organise activity based learning using various tools and techniques.



Teacher training programme for master trainers on vocational pedagogy and employability skills

The modules used for the training of teachers include: National Skills Qualifications Framework and Vocationalisation of School Education, Learning Outcomes 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 recommendations in the curriculum of vocational pedagogy. A fold of 733 master trainers from different States and UTs participated in the training programmes.

The list of teacher training programmes for master trainers on vocational pedagogy and employability skills organised during the year is given as follows.

S.No.	Title	Dates and Venue* (In virtual mode)
1.	Training Programme for developing Master Trainers on Vocational Pedagogy and Employability Skills for the States of Kerala and Goa	12–16 October 2020
2.	Developing Master Trainers on Vocational Pedagogy and Employability Skills for Andhra Pradesh and Karnataka	12–16 October 2020
3.	Developing Master Trainers on Vocational Pedagogy and Employability Skills for Tripura, Arunachal Pradesh, Meghalaya and Manipur States	02–06 November 2020
4.	Online Training Programme for developing Master Trainers on Vocational Pedagogy and Employability Skills for Odisha and Puducherry	23–27 November 2020
5.	Training for Professional Development of Master Trainers on Vocational Pedagogy and Employability Skills for Delhi, Bihar and Jharkhand	07–11 December 2020
6.	Training of Vocational Teachers to Prepare Youth on Employability Skills for the Changing World of Work for Southern States	18 to 22 January 2021
7.	Developing Master Trainers on Vocational Pedagogy and Employability Skills Programme for Uttar Pradesh and Uttarakhand	11–15 January 2021
8.	Training in the Field of Employment Planning Skills to <i>Kaushal Mitra</i> Teachers of Rajasthan State	18–20 January 2021
9.	Training for developing Master Trainers on Vocational Pedagogy and Employability Skills Programme	22–26 February 2021
10.	Teacher Training Programme for developing Master Trainers on Vocational Pedagogy and Employability Skills for the State of Haryana	24–28 March 2021

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

Twelve teachers’ training programmes were organised via the virtual mode on different vocational subjects (job roles) implemented under *Samagra Shiksha* for teachers of the implementing states. These programmes were organised for vocational teachers on assessment and evaluation techniques and job



Teachers’ training programmes on various job roles implemented under Samagra Shiksha

roles of Junior Software Developer, Assistant Beauty Therapist, Store Operations Assistant, Solanaceous Crop Cultivator, Floriculturist, Employability Skills, Sales Associate, Animator and Texturing Artist, Optical Fibre Splicer, Field Technician–Computing and Peripherals, Animal Health Worker, Dairy Worker and Green Skills. The teachers learned various pedagogic topics, such as overview of NSQF, role of vocational teachers, formulate general and specific objectives, teaching–learning methods and media, employability skills, implementation of lesson plan, and micro-teaching in schools. The participant teachers or trainers also learned various subject specific topics in the respective training programmes. In these training programmes, more than 1505 teachers from different States were trained.

The list of teacher training programmes on different job roles organised during the year is given as follows.

S. No.	Title of the Programmes	Dates and Venue (in virtual mode)
1.	Training Programme for Vocational Teachers on Assessment and Evaluation	18–20 August 2020
2.	Teachers’ Training Programme on Vocational Subject in IT-ITES implemented under <i>Samagra Shiksha</i> for Kerala State (Junior Software Developer)	12–16 October 2020
3.	Teachers’ Training on Assistant Beauty Therapist in Beauty and Wellness Sector	02–04 November 2020
4.	Training on Store Operations Assistant in Organised Retail Sector for different Regions	23–27 November 2020
5.	Teachers’ Training on Assistant Beauty Therapist in Beauty and Wellness Sector	25–27 November 2020
6.	Teachers’ Training Programme on Solanaceous Crop Cultivator in Agriculture Sector	14–18 December 2020

7.	Teachers' Training Programme on Sales Associate in Organised Retail Sector for different Regions	11–15 January 2021
8.	Teachers' Training Programme on Floriculturist (Open Cultivation) in Agriculture Sector	18–22 January 2021
9.	Training of Vocational Teachers for the Job Roles of Animator and Texturing Artist under Media and Entertainment Sector	01–05 February 2021
10.	Teachers' Training on Vocational Job Role Optical Fibre Splicer/Technician implemented under <i>Samagra Shiksha</i>	15–19 February 2021
11.	Teachers Training Programme on Vocational Subject on the Job Role of Field Technician — Computing and Peripherals in Electronic Sector implemented under <i>Samagra Shiksha</i> for Kerala State	08–12 February 2021
12.	Teachers' Training Programme on Animal Health Workers in Agriculture Sector for Teachers of Assam and Tripura	01–10 March 2021
13.	Teachers' Training Programme on Dairy Worker in the Agriculture Sector for Teachers of Jammu and Kashmir	01–14 March 2021

REGIONAL INSTITUTE OF EDUCATION (RIE), AJMER

Need based training programmes were organised for different stages of school education in different subjects through the virtual mode keeping in view the pandemic situation.

Title of the Programme	Venue and dates
Training Programme for DIET and SCERT Faculties on Research Methodology and Data Analysis	Virtual Mode 22–26 March 2021
Diploma Course in Guidance and Counselling (Distance/Online and Face-to-Face) — Self-financed Programme	January–December 2020

Diploma Course in Guidance and Counselling (Distance or Online and Face-to-Face) — Self-financed Programme

For the session 2020–21, advertisement for admission was given on the NCERT website as well as RIE, Ajmer, website and the letter had been dispatched to KVS, NVS and State authorities. Admission test and interview was held on 6 December 2019 and 50 students were selected. Out of which, 17 students were deputed from KVs, NVs and State schools. Three students from last year course also joined in the 2020–21 session. The first orientation programme was conducted from 25 to 27 February 2020. The students submitted all seven assignments in time. The contact programme was conducted online from 1 July to 15 October 2020. Fifty-three students attended the online contact programme and all practical training and internship in schools. Guest lectures

were also arranged to enrich the students. The written examination and *viva voce* was conducted from 5 to 13 November 2020 through the online mode. The internship for three months has been completed.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHOPAL

Training programmes were conducted in areas of teacher education, global citizenship education, research methodology, guidance and counselling, etc., as per the details given below.

S.No.	Title of the Programme	Venue and Date
1.	Capacity Building of Teachers working in Tribal concentrated Areas of Madhya Pradesh on the use of NCERT Mathematics Kit at the Elementary Stage	Online Mode 21–25 February 2021
2.	Capacity Building of Elementary Teacher–educators of Madhya Pradesh on Internship	Online Mode 1–5 March 2021
3.	Capacity Building Programme on Research Methodology for Teacher–educators	Online Mode 15–19 March 2021

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Diploma Course in Guidance and Counselling

Fifty candidates were admitted to the DCGC programme of the year 2020. As per the course requirement, the first orientation was held from 28 to 30 January, 2020. In view of the COVID-19 pandemic situation, the entire tutorial, contact and internship programmes of DCGC 2020 were shifted to the online mode. From April to June, a few tutorial sessions were organised to clarify doubts on the modules and to guide them on assignments and portfolio writing. The practicum or face-to-face phase programme was extended from July to September for a month till the end of October. Online examination was held in the first week of November 2020. Side-by-side, topics and methodology of internship were finalised with the help of mentors, and proposals were presented. Each student was scaffolded by internal and external supervisors.

REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

Induction Training of DIET Faculty of Andhra Pradesh

The training material on Induction of DIET faculty was successfully developed and disseminated. Thirteen onsite facilitators were given orientation through online video conferencing. A total of 179 DIET faculty members of Andhra Pradesh were trained. Participants found the training material useful for improving their job performance, understanding HR and material management, enabling to prepare budget proposals, for better understanding of ICT tools, etc.

Capacity Building Programme for KRPs in Waste Management

Thirty KRPs of Kerala State were trained through Google Meet to sensitise teachers regarding sustainable methods of waste management, provide support to schools in implementing waste management programmes effectively and develop a culture of effective waste management among children. The four Rs of Waste Management were explored, which help cut down the waste generated and help in the overall waste management process. Technologies

in waste management and social participation in waste treatment were the major topics covered.

Capacity Building of CTE Teachers of Karnataka

There were 49 participants from CTE faculty of Karnataka who participated in the training. There were deliberations on 18 themes of Teacher Education by experts. The participants expressed their satisfaction towards the programme. The programme was designed as per the needs of CTE's faculty by consultative meeting

Training of KRPs on setting up of Maths Lab at the Secondary and Higher Secondary Levels

In the second phase (6–8 January 2021), around 20 activities were taken up in detail with five each in Classes IX, X, XI and XII. Mathematics, the nature and the physical structure of Math lab were identified. Certain mathematical puzzles and some interesting patterns were also identified as a part of recreational Maths in lab. In the third phase, various ideas on setting up of Math lab were identified. Activities, demonstrations and discussions were beneficial.

Orientation on Technological Support for Teachers handling CWSN (CWD) for Effective Curriculum Transaction

The major areas covered are: universal design of learning and differentiated instruction in curriculum adaptation for CWSN; curriculum adaptation and assistive technology for categories, such as children with hearing impairment, communication disorders – cerebral palsy, visual impairment, specific learning disorders and communication disorders, such as autism spectrum disorders.

Training Mathematics and Physics Teachers of Tamil Nadu and Puducherry in Quality Teaching-learning using Different ICT Mediation

As a part of the programme, the team could successfully train Mathematics and Physics teachers from Tamil Nadu and Puducherry in ICT. The training programme helped the KRPs in understanding various ICT initiatives. They were able to use this in their regular classroom interactions. *GeoGebra* and *PhET* were the major thrust areas of the training. Teachers were given orientation on various online evaluation tools.

Capacity Building Programme for KRPs of Kerala on Career Guidance and Counselling at the Secondary and Higher Secondary Stage

Seventy teachers (both Secondary and Higher Secondary Level) from Kerala and Lakshadweep were trained in competencies for providing career guidance and counselling. They were acquainted with various techniques of disseminating career information in the schools.

S.No.	Title of the Programme	Venue and Dates
1.	Induction Training of DIET Faculty of Andhra Pradesh	Virtual Mode: 15–30 March 2021
2.	Capacity Building Programme for KRPs in Waste Management	Virtual Mode: 2–3 December 2020
3.	Capacity Building of CTE Teachers of Karnataka	Virtual Mode: 1–3 March 2021
4.	Training of KRPs on setting up of Maths Lab at Secondary and Higher Secondary Level	Virtual Mode: 15–19 March 2021

5.	Orientation on Technological Support for Teachers handling CwSN (CwD) for Effective Curriculum Transaction	Virtual Mode: 8–12 February 2021
6.	Training Mathematics and Physics Teachers of Tamil Nadu and Puducherry for Quality Teaching-learning using different ICT Mediation	Virtual Mode: 18–22 January 2021
7.	Capacity Building Programme for the KRPs of Kerala on Career Guidance and Counselling at the Secondary and Higher Secondary Stage	Virtual Mode: 27 January to 6 February 2021

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

Capacity Building of DIET and SCERT Faculty Members on Textbook Development at the Elementary Level for all North Eastern States

The capacity building programme for DIET and SCERT faculty members on textbook development at the elementary level was conducted by the North Eastern States through the virtual mode from 22 to 26 February 2021. The objectives of the programme were to orient the KRPs on the role of textbooks in education, sensitise the KRPs on key components involved in textbook design, appropriateness of content, illustrations, systemic issues and concerns in textbook writing and production, and empower the KRPs on the procedures and techniques of evaluating school textbooks. The programme had sessions on the current practices of textbook development, technical procedures in writing and production of textbook, textbook designs and the teaching of social science and language, criteria and guidelines for the development of an ideal textbook, sharing of tools for textbook analysis in science, social science and language, textbook analysis by the participants, group work presentations, etc.

A Training Programme for Teacher–educators of North East States on using ICT in teaching School Subjects in Inclusive Classroom at the Elementary Level

The objective of the programme was to empower teacher–educators on recent trends in technological advancements in the teaching–learning process of CWSN. The programme was conducted through the online mode from 8 to 10 February 2021 for teacher–educators from the States of Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland and Tripura. Some of the main areas covered are — Online Assessment Tools, Open Educational Resources, Learning Management System, MOOCs, e-Sandhya for Special Needs Learners, etc.

Certificate Course in Pre-School Education (2020–21)

The programme was conducted online through Google Meet due to the prevailing COVID-19 situation. The programme was conducted from 15 December, 2020–12 March 2021. The programme was conducted in three phases. The first phase was of six weeks on theory and skill development through online classes. The second phase was of four weeks on intensive internship in a Pre-school centre/ECCE centre. The internship was done under the supervision and mentorship of NERIE faculty. The third and final phase was of two weeks and consisted of presentation of internship reports, written examination or assessment, *viva voce* and sharing of experiences. A total of 19 candidates appeared in the examination but only 17 were able to complete it, and thus, obtain the completion certificates.

Training of Core Resource group in Bhoirymbong Block on Basic Counselling Skills

The programme was conducted at NERIE, Umiam, from 22–24 March 2020.

S.No.	Title of the Programme	Venue and Dates
1.	Capacity Building of DIET and SCERT Faculty Members on Textbook Development at the Elementary Level for all NE States	Virtual Mode: 22–26 February 2021
2.	Using ICT in teaching School Subjects in Inclusive Classroom at the Elementary Level	Virtual Mode: 8–10 February 2021
3.	Certificate Course in ECCE	Virtual Mode: 15 December 2020 – March 2021
4.	Training of Core Resource Group of Bhoirymbong Block on Basic Counselling Skills	NERIE, Umiam 22–24 March 2020

PRE-SERVICE COURSES IN RIEs

Course wise Students' Enrollment in the RIEs during the Session 2020–21

S.No.	Course	Ajmer	Bhopal	Bhubaneswar	Mysuru	Umiam (Meghalaya)
1.	B.Sc.B.Ed./B.Sc.Ed.					
	I Year	108	79	108	82	–
	II Year	93	72	100	81	–
	III Year	90	70	97	79	–
	IV Year	88	65	95	74	–
2.	B.Ed. (Secondary)					
	I Year	102	85	109	52	46
	II Year	89	–	100	50	48
3.	B.A. B.Ed./B.A.Ed.					
	I Year	54	44	55	44	–
	II Year	45	39	49	39	–
	III Year	43	37	47	38	–
	IV Year	40	37	48	37	–
4.	M.Sc. M.Ed.					
	I Year	32	20		49	–
	II Year	23	18		45	–
	III Year				45	–
	IV Year				41	–
	V Year				36	–
	VI Year				36	–
5.	M.Ed.					
	I year			36	29	–
	II year			32	11	–
6.	DCGC	47	48		45	–
	Total	854		926		

RIE Students' Performance in University Examination 2020-21

S.No.	Course	Ajmer		Bhopal		Bhubaneswar		Mysuru		Umiam	
		No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %	No. of Students Appeared/ Passed	Pass %
1.	B.Sc. B.Ed./B.Sc.Ed.										
	I Year Appeared/ Passed	93/93	100	-	-	107/100	93.46	-	-	-	-
	II Year Appeared/ Passed	91/91	100	-	-	103/101	98.06	-	-	-	-
	III Year Appeared/ Passed	88/88	100	-	-	94/94	100	-	-	-	-
	IV Year Appeared/ Passed	85/85	100	64/64	100	101/100	99.01	-	-	-	-
2.	B.Ed.										
	I Year Appeared/ Passed	88/88	100	-	-	100/100	100	-	-	-	-
	II Year Appeared/ Passed	84/81	100	77/77	100	96/94	97.92	-	-	46/46	100
3.	B.El.Ed. Appeared/ Passed	-	-	-	-	-	-	-	-	-	-

	V Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	VI Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6.	DCGC Appeared/ Passed	43/43	100	48/48	100	-	-	-	-	-	-	-	-	-	-	-	-	-
7.	B.A. B.Ed./B.A.Ed.																	
	I Year Appeared/ Passed	-	-	-	-	-	-	-	51/45	88.24	-	-	-	-	-	-	-	-
	II Year Appeared/ Passed	-	-	-	-	-	-	48/48	100	-	-	-	-	-	-	-	-	-
	III Year Appeared/ Passed	-	-	-	-	-	-	48/48	100	-	-	-	-	-	-	-	-	-
	IV Year Appeared/ Passed	-	-	38/38	100	-	-	49/49	100	-	-	-	-	-	-	-	-	-
8.	M.Phil.																	
	I Year Appeared/ Passed	-	-	-	-	-	-	10/9	90	-	-	-	-	-	-	-	-	-
	II Year Appeared/ Passed	-	-	-	-	-	-	6/6	100	-	-	-	-	-	-	-	-	-

9.	M.Sc. (LS)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	I Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
10.	3 Year B.Ed.-M.Ed. (New Courses)																			
	I Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	II Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	III Year Appeared/ Passed	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11.	DCGC	-	-	-	-	-	-	-	-	-	-	34/34	100	-	-	-	-	-	-	-



7. Extension Activities

The NCERT extends its operation in the 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 programmes 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 and UTs.

The extension programmes conducted by the Council during the year include— National Conference on Early Childhood Education; Minority Cell and Activities of the Minority Cell; Guidance and Counselling Services to Support Mental Health Challenges of Students during and after COVID-19; Meeting on strengthening of DIETs; Integrated Multidisciplinary Professional Advancement Course for Teachers; National Webinar on Teacher Education; Concerns, Challenges and Innovations; National Awards for Innovative Practices and Experiments in Education for Schools and Teacher Education Institutions; Information Literacy Programme for the users of NCERT Library; Resources and Support for Web and Online Activities; Resource-cum-Activity Centre in ET/ICT for School and Teacher Training; International Conference on Emerging Trends in ICT in Education and Training; National Conference on transforming Vocational Education and Training for Excellence: Perspectives and Challenges; National and Regional Consultation Meeting-cum-Workshop for Implementation of Vocational Education in Schools under *Samagra Shiksha*; Diploma in Vocational Education and Training (DVET); Extension Lecture Series; Extension Lectures; Expression Series on Eminent Personalities; Internship Programme; Working with the Community; Academic Lecture Series; Fit India School Week; Celebration of Independence Day, Republic Day, Teachers' Day, Mahatma Gandhi's 150th Birth Anniversary, World Population Day, International Mother Language Day, International Women's Day, National Science Day, and National Education Day; Diploma Course in Guidance and Counselling (Self Financed, Blended Mode); National Seminar on Issues and Challenges in Minority Language Education; National Library of Educational and Psychological Tests (NLEPT); Centre for Popularisation of Science; Meetings of Screening-cum-Progress Monitoring Committee (SPMC) of Educational Research and Innovations Committee (ERIC), etc.

DEPARTMENT OF ELEMENTARY EDUCATION

National Conference on Early Childhood Education (ECE)

The National Conference on Early Childhood Education (ECE) was organised during 15–17 July 2020 via the online mode. The purpose was to provide a platform for sharing of researches, and innovations for quality improvement in ECE and to build an understanding of new developments and challenges in the quality of ECE. Participants from two Countries (Germany and US) and 18 States and UTs (Sikkim, Delhi, Manipur, Madhya Pradesh, Tamil Nadu, Mizoram, Kerala, Assam, Karnataka, Maharashtra, Telangana, Andhra Pradesh, Rajasthan, Jammu, Meghalaya, Uttar Pradesh, Himachal Pradesh and Haryana) participated in the conference. The conference also had representation from all Regional Institutes of Education (RIEs), National Institute of Educational Planning and Administration (NIEPA), Save the Children, Azim Premji Foundation and Universities like Ambedkar University, Delhi University and Jamia Millia Islamia. The innovations and good practices shared were related to the curriculum, pedagogy, ICT, infrastructure, TLMs, learning environment, school readiness, safety, health, teacher preparation, management, convergence and accreditation in the area of ECE. The papers presented have suggested keys to different issues and concerns existing in the planning and implementation of any ECE programme.

Celebration of the Mother Language Day

The International Mother Language Day was celebrated on 21 February 2021 with a lecture by Dhir Jhingran, *Founder and Executive Director*, Language Learning Foundation and *Former-Principal Secretary*, Government of Assam. He delivered a lecture on the importance of mother tongue in one's life and in learning. He highlighted the importance of multilingualism in inclusive education, ways and means of realising mother tongue based language education in schools and how language teachers can shift from one language to another for a better understanding of school children. It was followed by a *Dastangoi* programme on the life of Mahatma Gandhi and singing of songs in different languages.



Celebration of the Mother Language Day



DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS

Minority Cell and Activities of the Minority Cell

The first online Minority Cell meeting was organised on 26 November 2020 at NIE, New Delhi. The meeting was attended by 14 Minority Cell members. The members discussed the academic programmes conducted in the area of education of children belonging to minority groups and suggested measures to improve the quality of education of minority children.

National Population Education Project and Adolescent Education Programme

The National Population Education Project (NPEP) and the Adolescent Education Programme (AEP) are being implemented by the NPEP unit of the Department in 36 States and UTs. The programmes include the concern for adolescents as an important component. The implementing and co-ordinating agencies are KVS, NVS and NCERT. Presently, the NPEP has given much focused attention to the School Health and Wellness Programme under the *Ayushman Bharat* initiative of the Government, in collaboration with the Ministry of Health and Family Welfare. For the purpose of implementing the programmes across the States and UTs, a lot of materials have been prepared in both English and Hindi. They include modules, charts, e-material and small videos. Many States have also contributed in taking up research studies, especially, regarding issues and concerns of adolescents.

Periodic and annual meetings are organised under NPEP and AEP to review the status of activities planned by the implementing agencies and to prepare the Annual Work Plan of AEP and Plan of Action of NPEP for the next year. In this meeting, officials from the implementing States and UTs and National agencies, such as KVS, NVS, NCERT and UNFPA participated with the Project Finance and Monitoring Committee to discuss and approve the Plan of Action of NPEP and the Annual Work Plans of AEP.

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS

Centre for Popularisation of Science

For the popularisation of Science, two centres namely, Science Park and Herbal Garden, are being maintained. Science Park is an open air park in which working models provide hands-on experiences to children, teachers, teacher-educators, NGOs and other functionaries concerned with the teaching of science in schools to understand and appreciate certain selected principles of science. The Herbal Garden has around 200 medicinal plants. Guidance to schools in developing similar science parks and gardens in their institutions (on demand) is also provided. For inculcating scientific temper among all, the department also celebrates many important days dedicated to science under this programme.

Celebration of the National Science Day 2021

For celebrating the National Science Day on 28 February 2021, an interactive question-answer session by eminent virologist, Gagandeep Kang (FRS), was



organised by the department. The topic of his deliberation was ‘An Interaction with Professor Gagandeep Kang’. Professor Sridhar Srivastava, *In charge Director*, NCERT chaired the session and addressed the gathering.



Professor Gagandeep Kang, Eminent Virologist, interacting online with teachers and students during the celebration of the National Science Day-2021

School Science

The quarterly journal, *School Science*, is published by the department, which gives a platform for publishing articles, innovations and experiences in teaching-learning of science and mathematics education. The Resource Centre for Science and Mathematics Education (RCSME) of the department collects and disseminates the information on all aspects of science, mathematics and environment education. A special issue on ‘COVID-19 and the Environment’ is being published for 2020-21.

DIVISION OF EDUCATIONAL KITS

In order to cope with the mass production and supply of educational kits to users, the NCERT has empanelled firms to manufacture and supply these Kits. Under the Central Government flagship programmes of *Samagra Shiksha Abhiyan* (SSA), the State Governments are procuring these educational kits on a large scale either directly from NCERT or from NCERT empanelled firms.

The educational kits have been showcased in different national events and book fairs across the country.

S.No.	Name of Programme	Organisation	Dates
1.	Atmanirbhar Bharat 2021 Conference and Talk Show (B2B, Conference cum Exhibition) at Udaipur, Rajasthan	Friends Exhibition and Promotions	11-12 January 2021
2.	National Expo and Conference 2021, Bhopal	Bhartiya Shikshan Mandal, Nagpur	15-17 March 2021



DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION

National Library of Educational and Psychological Tests (NLEPT)

The NLEPT at the Department aims to enrich the test library continuously and provide consultancy to researchers regarding identification and use of test materials in the areas of school and teacher education. Seven educational and psychological tests in the areas of adjustment, personality, coping, interest, and vocation preference were procured for the benefit of the researchers and practitioners. Consultancy was provided to the researchers regarding identification and use of the test materials.

Guidance and Counselling Services to support Mental Health Challenges of Students during and after COVID-19

In order to help school students across the country to share their concerns and deal with their mental health concerns during COVID-19, various initiatives were undertaken. One of these initiatives was telecast during live interactive sessions called 'SAHYOG: Guidance for Mental Well-being of Children'. These were telecast every day for 30 minutes with school counsellors and experts on SWAYAM PRABHA Channel. Also, a free 'Counselling Services for School Students' was started on 24 April 2020, in which trained counsellors rendered their services.

DEPARTMENT OF TEACHER EDUCATION

Meeting on strengthening of DIETs

A meeting on 'Strengthening of DIETs' was conducted with DIETs' Principals and faculty members from Eastern States and UTs viz., Bihar, Jharkhand and Andaman and Nicobar Islands on 3 and 4 February 2021. Major issues like infrastructure, availability of resources, major activities and resources, administrative and academic challenges related to DIETs were discussed in the meeting.

Integrated Multidisciplinary Professional Advancement Course for Teachers (IMPACT)

Based on the demand of Jammu and Kashmir, a 30-day IMPACT was designed and implemented for Key Resource Persons in Jammu and Kashmir in 2020-21. In July-August 2020, online support was provided to the UT for the conduct of IMPACT with teachers. Online support was also provided to strengthen the proposal of setting up of SCERT in Jammu and Kashmir. Further, on the request of Ladakh, IMPACT programme was conducted online for 50 KRPs of Ladakh, who were to train 3000 teachers in November 2020.

National Webinar on Teacher Education: Concerns, Challenges and Innovations

A national webinar on Teacher Education Concerns, Challenges and Innovations was organised from 1 to 4 July 2020. The four days' webinar deliberated on different themes related to teacher education, such as Pre-service Teacher Education Programmes, Continuous Professional Development, Integration of ICT in Teacher Education, Teacher Education for Preparing Teachers in an Inclusive Classroom, Integrated Teacher Education Programme (ITEP) and



Professional Standards, Ethics and Teacher Assessment. A total of 49 papers were presented in the webinar covering the six themes. The webinar was inaugurated by Professor H.K. Senapaty, Former *Director*, NCERT. Professor M.A. Siddiqui, Former *Chairperson* of NCTE, delivered the keynote address. In his address, he focused on major crisis that the Indian education system is presently facing and the vital role of teachers in addressing the crisis.

Apart from the theme-based paper presentations, some panel discussions were also conducted on themes, such as 'Preparing 21st Century Teachers: Concerns and Possibilities', and 'Teacher as a Learner: Role of CPD and Professional Standards, Ethics and Teacher Assessment'. There were two sessions on case presentations by teachers and teacher education institutions. The discussions and deliberation during these four days of the webinar highlighted some of the pertinent issues and concerns in teacher education, such as new role in preparing teachers, teacher-educators, educational practitioners in terms of pedagogical practices, gender, technology integration, school internship, assessment, inclusive education, continuous professional development and other aspects.

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

In the early 1960s, the NCERT had launched a programme titled 'Seminar readings programme for teachers and heads of secondary schools'. In 2018-19, it 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 programme are: to sensitise teachers and teacher-educators about the potential of innovative practices and experiments for the 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 the problems they face and adopt a realistic approach to find solutions; to create an environment in schools and teacher education institutions by encouraging innovations so as to ensure their sustainability; and to provide a forum to teachers and teacher-educators to share their innovative ideas with all the stakeholders.

The National Seminar for the year 2020 was organised virtually on 2-3 March 2021. Selected teachers and teacher-educators were invited to present the report in the seminar. A total of 28 teachers and teacher-educators were awarded with cash a prize of ₹10,000/- and a certificate.

LIBRARY AND DOCUMENTATION DIVISION

Acquisitions, Expenditure, Documentation and Information Services during 2020-21

1. Acquisitions		
Books and Journals		
A.	Books Purchased (132452-132823)	372
B.	Books Received as gift (F32718- F32946)	229



C.	Bound Journals Accessioned (J21095-J21340)	246
D.	Withdrawn Books	08
2. Expenditure on Books, Journals, Binding and PAC Programme		
A.	Books	3,86,874
B.	Periodicals, Journals and other Magazines	97,53,006
C.	Stationery	Nil
D.	Binding (Journals and Books)	16,332
E.	P.A.C. Programme	14,148
Total		1,01,70,360
3. Resource Generated by LDD		
	Photocopy charges	1,457
	Security money – Institutional Membership	35,000
	Renewal charges – Institutional Membership	Nil
	Lost books (with 25% surcharge)	666
	Overdue charges	Nil
	Loss of Library I-Card	Nil
	Scrap	Nil
Total		37,123
4. Journals Subscribed		
	Foreign Journals	107
	Online Database (J STOR-1; DELNET-1)	02
	Online Journals (alongwith print copy)	45
	Indian Journals	37
	NCERT Journals	07
	Magazines (i) English-12 (ii) Hindi-08	20
	Newspapers (i) English-10 (ii) Hindi-06 (iii) Urdu-01	17
5. Documentation and Information Services		
A.	Information Products	
	Current Contents	12
	New Arrivals on Display	07
	Book Reviews	09
	Press Clippings	08
	Bibliography (Educational Toys)	01
B.	Photocopying Service	
	For official purpose	5097 pages
	On payment basis	1457 pages



6. Circulation Services		
A.	Membership as on 31/03/2021	1539
B.	Membership Enrolled	
	NCERT Employees (New)	03
	Special (NCERT Retired Staff)	02
	External (Renew)	01
	Temporary Membership	12
	Casual Membership	58
	Institutional Membership	07
	Memberships discontinued during 2020–21 (due to Superannuation or Completion of Projects)	52
Total Membership		1505
C.	No Dues Certificate Issued	95
D.	External readership	801
E.	Total number of books issued	365
F.	Total number of books returned	178
G.	Books issued on inter library loan	93
H.	Books borrowed on inter library loan	11
I.	Website Visitors (since February 2012)	73635291

Information Literacy Programme for the users of NCERT Library

The Information Literacy Programme was organised on 18 March 2021 for its readers to familiarise them with information literacy skills for wider readership at regular intervals. In this context, Uma Kanjilal, *Professor*, DLIS, IGNOU, New Delhi, delivered a lecture on the 'Role of National Digital Library of India (NDLI) for academic purposes'.



Information Literacy Programme organised by LDD

PUBLICATION DIVISION

Grant of Copyright for Adoption, Adaptation and Translation to various States and UTs

The NCERT granted copyright of its textbooks to the following States and UTs, based on their request, for adoption, adaptation and translation for the year 2020–21.



Copyright permission for the year 2020–21

S.No.	State	Agency	Classes for which copyright is given
1.	Odisha	<i>Joint Director</i> , Odisha Primary Education Programme Authority, Bhubaneswar, Odisha	Mathematics Learning Kit for Classes I and II
2.	Punjab	<i>Director</i> , General School Education, SSAA, Mohali, Punjab	
3.	Kerala	<i>Director</i> , SCERT, Thiruvananthapuram, Kerala	Classes XI and XII (Vocational Education)
4.	Himachal Pradesh	Himachal Pradesh School Shiksha Board, Dharamshala, Himachal Pradesh	Classes I to X
5.	Karnataka	Karnataka Textbook Society, Bengaluru, Karnataka	Classes I to X
6.	Madhya Pradesh	Sanchalak, Rajya Shiksha Kendra, Bhopal, Madhya Pradesh	Classes I–XII
		Rashtriya Madhyamik Shiksha Abhiyan, Bhopal, Madhya Pradesh	Classes IX–X (13 Vocational Education Books)
7.	Jammu and Kashmir	<i>Director (Academic)</i> Jammu and Kashmir, Rehari Colony, Jammu	Classes VI to X
8.	Jharkhand	Rajya Pariyojna Nideshak, JEPC, Dhurva, Ranchi, Jharkhand	General Books for Library
		<i>Director</i> , JCERT, Ratu, Ranchi, Jharkhand	
9.	Rajasthan	Rajasthan Rajya Pathya Pustak Mandal, Jaipur, Rajasthan	Classes I to IX and XI
10.	Uttarakhand	<i>Director</i> , Madhyamik Shiksha, Uttarakhand	Classes I–XII
11.	Kerala	<i>Director</i> , SCERT, Thiruvananthapuram, Kerala	Classes XI to XII, (Vocational Education)
12.	Uttar Pradesh	<i>Secretary</i> , Madhyamik Shiksha Parishad, Prayagraj, Uttar Pradesh	Classes IX–XII
13.	Goa	Board of Secondary and Higher Secondary Education, Alto-Betim, Goa	Classes IX–XII
		SCERT, Goa	Classes I–VIII
14.	Tripura	SCERT, Agartala, Tripura	Classes I–XII
15.	Delhi	<i>Secretary</i> , Delhi Bureau of Textbooks (DBTB), Janakpuri, Delhi	Classes I–VIII
16.	Gujarat	<i>Director</i> , Gujarat School Board of Textbooks, Gujarat	Classes I–XII



17.	Haryana	<i>Sahayak Nideshak</i> , Haryana Vidyalaya Shiksha Board, Bhivani, Haryana	Classes IX–XII
		<i>Sahayak Nideshak</i> , Vidyalaya Shiksha Nideshalaya, Panchkula, Haryana	Classes I–VIII
18.	Assam	<i>Samagra Shiksha</i> , Kahilipara, Guwahati, Assam <i>Registrar</i> , Krishna Kanta Handiqui State Open University, Patgaon, Rani, Guwahati, Assam	Classes IX and XI Vocational Education Modules
19.	Maharashtra	<i>Director</i> , SCERT, Pune, Maharashtra	General Books
20.	Mizoram	School Education Department, Government of Mizoram, Mizoram	Classes I–VIII
21.	Nagaland	Nagaland Board of School Education, Kohima, Nagaland	Classes IX to XII (Math and Science)
22.	Punjab	<i>Secretary</i> , Punjab School Education Board, Mohali, Punjab	Classes VI–XII (Math and Science)
23.	Bihar	Bihar State Textbook Corporation Publishing Ltd., Patna, Bihar	Classes IX–XII

In total, 28 agencies of 23 States and UTs have obtained copyright permission in 2020–21.

All these above States and UTs have obtained copyright for NCERT textbooks published under NCF 2005, constituting a significant portion of the student community.

During the year under report, 779 publications were released. The NCERT also publishes many research journals pertaining to school education. The journals brought out during 2020–21 are as follows.

Quarterly Journals

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

Half-yearly Journal

- ❑ *Indian Educational Review*

In its endeavour to make quality textbooks available at a reasonable price to students in all parts of the country, the NCERT has empanelled 992 booksellers as vendors. For the distribution of Urdu Publications, the NCERT has engaged Urdu Academy, Government of NCT Delhi, as its distributor.

With the help of a dedicated web portal, 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 helps NCERT to ascertain the demand of textbooks but also supply them on priority basis. Schools have the option to either collect their requirement of NCERT textbooks from any other empanelled vendor or directly from NCERT as per their convenience. The NCERT web portal also extends the facility to individuals (students, parents) and institutions to place online order for NCERT publications. The orders so received at the NCERT web portal are delivered through registered book post at the customers' doorstep, for which NCERT bears the postal cost.

Publication Division, NCERT, is also supplying textbooks directly to various educational institutions, government agencies and school organisations, such as Navodaya Vidyalaya Samiti, Model Schools of different States, governments of Arunachal Pradesh, Sikkim and Gujarat. Besides textbooks, the NCERT published several titles viz., teachers' guides, research monographs, supplementary reading material and books on vocational courses. The NCERT supplied literacy tools to the Government of U.P., Haryana and Himachal Pradesh for more than 100 crores of Rupees.

Four Regional Production-cum-Distribution Centres of Publication Division, NCERT, located at Kolkata, Bengaluru, Ahmedabad and Guwahati are catering to the needs of publications in Eastern, Southern, Western and North Eastern parts of the country, respectively. The Delhi headquarters is catering to the requirement of North India.

There are total 10 Sales Counters operated directly by Publication Division, NCERT. These counters are functional throughout the year at four RPDCs, five Regional Institutes of Education and at the Delhi headquarters to ensure easy availability of NCERT publications to students, parents, schools, among others.

Hindi Cell

Hindi Pakhwada and Hindi Day Celebrations

Taking into account the circumstances occurred due to the COVID-19 pandemic, online programmes were organised by the Council. On the occasion of *Hindi Diwas* (Hindi Day) on 14 September, the message of the Hon'ble Minister of Education was displayed on the website of the Council under the link 'Hindi Fortnight'. The maxims of prominent political personalities and other stalwarts in the field of Hindi language and literature were displayed on posters at various important places in the Council. Entries were invited from the employees of the Council on self-created Hindi stories, poems and essays on the topic, *Hindi Ki Vikas Yatra Vartaman Sthiti aur Bhavi Sambhavanayen* ('The Journey of Hindi in the Current Circumstances and its Future Prospects') and were uploaded on the webpage. A panel discussion on *Rajkaaj ki Bhasha—Hindi* ('Official language Hindi') was recorded and the recording was made available on the council's *YouTube* Channel and other media forums. A live discussion was held and its video recording on the subject *Hindi ki Sambhavanayen aur Chunoutiyan* ('Challenges and Prospects of Hindi Language') titled '*Suno Kahani*' ('Listen to the Story') was disseminated through NCERT's *YouTube* channel. A video was recorded and telecast on poetic creations of eminent poet Sunil Jogi (Padma Shree awardee). The videos prepared by CIET on eminent Hindi



poets and writers were made available on the webpage (www.ncert.nic.in/hindi-pakhwada/php) for the employees of the Council and the same was also made available through the *YouTube* channel.

Workshops, Lectures and Official Language Inspections for the Progressive use of Hindi

The recordings of lectures for the use of Hindi in official work, 'Hindi Noting and Drafting', and 'Gorification of Hindi', etc., were made available on the e-Office online link for the Council's employees.

As the circumstances were not conducive for physical inspection, proformas were sent to all Regional Institutes of Education of NCERT regarding the work done in Hindi. Online inspections were also carried out to check the status of Official Language in various departments, divisions and sections, etc., of the Council.

Annual Incentive Award Scheme for Employees

For doing maximum day-to-day work in Hindi, under the award scheme of the Government of India, seven employees of the Council, Pradeep Kumar Sharma, *UDC*, E-II Section; Manoj Kumar, *UDC*, E-II Section; Poonam, *UDC*, CR Cell; Ram Niwas Sharma, *Assistant*, V&L Section; Shitanshu Saxena, *LDC*, RMSA Section; Hem Chander, *LDC*, Accounts Branch; and Anil Kumar, *LDC*, C&P Section were awarded with cash prizes and certificates.

Translation

The 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 the meetings 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 translated to enable its access in Hindi as well.

Rajbhasha Shield Award for Utmost Work in Hindi

The Rajbhasha Shield Awards for utmost work in Hindi were given to the Department of Gender Studies and Security Section, NIE, New Delhi for doing maximum work in Hindi on the basis of quarterly reports for the year 2019-20. It is hoped that other departments, divisions and sections will also be inspired by this effort and may try to do maximum correspondence in Hindi.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY

Resources and Support for Web and Online Activities (Portal and mobile apps)

In order to create, customise, update and maintain the existing NCERT websites and new websites, forms and mobile apps, including bug fixing and patching as per the need, this project was conceived. We have proposed to make the existing websites and mobile apps accessible as per international guidelines. Under this mission, we have undertaken the conversion of NCERT textbooks into EPUBS and Flipbook format for their dissemination. Creation of interactive e-Contents like H5P, comic books and their uploading on NCERT website are



also a part of this programme. We are creating Quick Response (QR) codes in new textbooks to enhance the discoverability of the content or the books. Technical support is provided for web development and deployment activities to NIE departments, RIEs, PSSCIVE, States and UTs, and other countries. Periodic security audit of mobile apps and web portals are also regular activities. We have recently relocated the existing NROER platform from the HBCSE server to NIC Cloud. We assist parents, teachers, teacher-educators and the public at large to access these digital resources and help the children achieve expected levels of learning.

Under this programme, development of the following resources were done during 2020–21. The NCERT website has been redesigned, and made more user friendly. The Hindi version of the NCERT website has also been developed and made Live. UMANG e-Pathshala API modification and coordination with UMANG team has also been done to further disseminate e-Content and textbooks through e-Pathshala. The e-Pathshala website has been made accessible as per the GIGW and W3C guidelines for web accessibility. Some of the works done are: uploading videos on *YouTube* and mapping on SSP Mauritius portal, uploading videos on the NCERT official *YouTube* channel and showcase on e-Pathshala website; and updation of biodata and contact details of all faculty and administrative staff of NIE and CIET. The SWAYAM MOOCs page at CIET website has been redesigned. Digitisation of NCERT textbooks in Flipbook and ePUB formatting has also been done, apart from resolving the downloading issue of NCERT books in e-Pathshala Mobile App and CIET Audiobooks page design modification. Solved vulnerability reports received by NIC Audio lessons and programmes have been uploaded on DIKSHA, e-Pathshala and NROER portals. Accessibility tools implemented on e-Pathshala Website Development of catalogue are— The India Toy Fair 2021, Digital Games Development of H5P interactive content Update e-Pathshalapdf books metadata, Urdu textbooks converted from Non Unicode to Unicode. Accessibility features have also been enabled on the e-Pathshala Website. Regular updation and maintenance of 15 websites and nine mobile apps of NCERT is also being carried out. As on 31 March 2021, the nine Mobile Apps of NCERT, and the Mobile App wise data are as follows.

1. DIKSHA
Active users - 83,10,009; Total users - 2,68,92,304
2. e-Pathshala Android
Active users - 5,09,059; Total downloads - 43,25,634;
e-Pathshala IOS
Total downloads - 72,028; Total download (Windows) - 1,06,216
3. NISHTHA APP
Active Users - 3,11,472; Total downloads - 9,34,419
4. NAS-NCERT
Active users - 1,769; Total downloads - 19,566



5. PARAKH
Active users - 197; Total downloads - 2,286
6. SSP Mauritius
Active users - 288; Total downloads - 1,538
7. PINDICS
Active users - 2,868; Total downloads - 43,012
8. e-Pathshala AR
Active users - 1,146; Total downloads - 10,802
9. e-Pathshala Scanner
Active users - 27,097; Total downloads - 1,76,301

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

Internship in ICT for M.Ed. students from Jamia Millia Islamia, Amity University and Regional Institute of Education, Bhopal, was organised during the session in blended and online mode.

International Conference on Emerging Trends in ICT in Education and Training

To bring together leading academicians, researchers and policy makers to deliberate on all emerging trends in ICT in Education and Training, the International Conference on Emerging Trends in ICT in Education was proposed to nurture the learnability. The aim was to build the competencies in our learners for the new age learning ecosystem. The idea was to deliberate upon the pedagogical and institutional arrangements in the context of Disruptive and Immersive Technologies. Also, it aimed to deliberate upon new learning spaces that accommodate and support new types of learning experiences and yet unknown technology advancements without compromising on individuality, creativity and innovation under the guiding principles of NEP 2020 on ICT in Education with special reference to disruptive technologies.

The conference was conducted from 24 to 26 March 2021 via the virtual mode. Three technical sessions and two panel discussions were held. The conference was also telecast Live on *YouTube* simultaneously. Around 130 participants joined the conference on all three days. Around 200 participants attended through *YouTube* Live. Around 180 papers were received. 23 papers were selected and presented during the conference. Three best papers were selected for publication in the *Indian Journal on Educational Technology*.

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

National Conference on Transforming Vocational Education and Training for Excellence: Perspective and Challenges

The 'National Conference on Transforming Vocational Education and Training for Excellence: Perspective and Challenges' was organised on 25–26 March 2021. It was inaugurated by Professor Sridhar Srivastava, *Director (I/c)*, NCERT,





Professor Rajesh P. Khambayat, Joint Director, PSSCIVE, Bhopal, addressing the audience at the conference on Transforming Vocational Education and Training for Excellence: Perspective and Challenges



The release of A Handbook on Guidelines of On-the-job Training for School Students during the Seminar

New Delhi. Dr. C. Thangaraj, *Director, NITTTR, Bhopal*, was the Guest of Honour and Soo-Hyang Choi, *Director, UNESCO-UNEVOC, International Centre Bonn, Germany*, was the Special Guest for the conference. Guests and delegates of the Conference were welcomed by Professor Rajesh P. Khambayat, *Joint Director, PSS Central Institute of Vocational Education (PSSCIVE), Bhopal*. The conference was attended online by around 1000 delegates and was also telecast on the official *YouTube* channel of PSSCIVE.

The keynote sessions were chaired by Professor N.K. Ambasht, *Former Chairperson, NIOS, Noida*, on 'Future Trends in Vocational Education and Training and World of Work' and Professor Rajesh P. Khambayat on 'Transforming VET through Excellence'. The theme of the six technical sessions were— (i) Transforming VET through Excellence— Priorities and Challenges; (ii) Professional Development of Teachers for VET Excellence in Schools; (iii) New-age Quality Vocational Education System: Challenges and Perspectives; (iv) *National Education Policy 2020: Strategic Priorities for VET System in India*; (v) Building VET Excellence through Partnership and Networking and (vi) Good Practices and Lessons Learn in VET. One panel discussion was also held on 'Institutional Development for Achieving Excellence in VET'.

A *Handbook on Transforming Vocational Education and Training for Excellence: Perspective and Challenges* and a *Handbook on Guidelines of On-the-Job training for School Students* were released by Professor Sridhar Srivastava, *Director (I/c), NCERT*, during the Conference.

Regional Consultation Meeting-cum-Workshop for the Implementation of Vocational Education in Schools under Samagra Shiksha for the States

The institute organised two regional consultation meeting-cum-workshops for the implementation of vocational education in schools under *Samagra Shiksha* for Northern, Western, Eastern, Southern and North Eastern Regions from 5 to 7 January 2021 and 19 to 21 January 2021. Senior officials and key functionaries from different States participated in the meeting, including Madhya Pradesh, Chhattisgarh, Bihar, Jharkhand, Odisha, West Bengal, Jammu and Kashmir, Delhi, Himachal Pradesh, Uttarakhand, Uttar Pradesh and Punjab. The meeting-cum-workshops were also attended by the representatives of various Sector Skill Councils. During the meetings, a presentation was given by Professor Rajesh P. Khambayat, *Joint Director, PSSCIVE* on 'Overview of NEP 2020—



Re-imagining of Vocational Education’. During both the meetings, lectures were given by faculty members on ‘Vocationalisation of School Education under *Samagra Shiksha*— Priorities and Challenges’, ‘Planning and Implementing Vocational Education’, ‘Introducing Pre-vocational Education from Classes VI–VIII’ and ‘Integrating Employability Skills in Vocational Education’. The guest speakers also gave presentations during the programme on the topics— Enhancing the Quality of VE through Industry Linkages, Apprenticeship Training, Accreditation, etc., Emerging Future Directions in VET – Industry 4.0, Artificial Intelligence, etc., Emerging Priorities in VE and Skill Mapping Presentation and Management and Monitoring of Vocational Education in Schools under *Samagra Shiksha*.



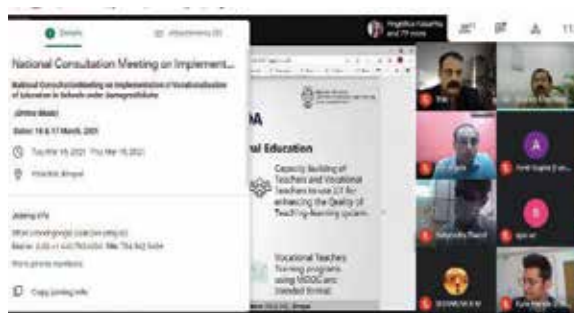
Regional Consultation meeting-cum-workshop for the implementation of vocational education in schools under Samagra Shiksha for the States

Presentations on Good Practices and Current Status of VE in States and UTs were done by different representatives of the participating States. They also discussed the new initiatives for Vocational Education with the representatives of the Sector Skill Councils. On the last day, the participants prepared an action plan on Vocational Education for NEP 2020.

National Consultation Meeting-cum-Workshop for the Implementation of Vocational Education in Schools under Samagra Shiksha

The ‘National Consultation Meeting on Implementation of Vocationalisation of Education in Schools under *Samagra Shiksha*’ was inaugurated by Professor Sridhar Srivastava, *Director (I/c)*, NCERT. The meeting was organised on 16 and 17 March 2021 through the online mode in the backdrop of the recommendations on Vocational Education in the *National Education Policy 2020*. Santosh Kumar Yadav, *Joint Secretary (SS-I)*, Department of School Education and Literacy, Ministry of Education (MoE), Government of India was the Guest of Honour. Rajesh P. Khamabyat, *Professor and Joint Director*, PSSCIVE, made a presentation on the agenda and action points for deliberations during the meeting.

Around 100 delegates from the Ministry of Education (MoE), Ministry of Skill Development and Entrepreneurship (MSDE), National Skill Development Corporation (NSDC), Department of School Education and Examination Boards of States/Union Territories, State



National consultation meeting-cum-workshop on the implementation of vocational education under Samagra Shiksha being held via the online mode



Council of Educational Research and Training (SCERT), National Institute of Open Schooling (NIOS), Central Board of Secondary Education (CBSE), and representatives from Sector Skill Councils attended the meeting.

The participants deliberated on the future prospects and directions for 21st century skills and vocational skills, in light of the recommendations of NEP 2020. It was resolved to provide quality vocational education to all, focusing on strengthening the infrastructure, use of technology, training of vocational teachers and promotion of industry and institutional collaborations for practical training and hands-on learning experiences.

Diploma in Vocational Education and Training (DVET)

The PSS Central Institute of Vocational Education launched the one-year Diploma in Vocational Education and Training Programme (Contact Mode) in the month of April 2019, aiming to prepare a teacher specifically for vocational subjects. Initially, the programme was run in contact mode but looking at the pandemic situation due to the outbreak of COVID-19 during the year 2020–21, the programme was carried out via the distance mode. The institute also developed a document titled ‘Diploma in vocational education and training (distance mode) programme guide’ based on the guidelines of Diploma in Guidance and Counselling course. The document contains 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 printed and a copy of the document is uploaded on the institute’s website. This year, 39 students were enrolled for the programme from different States and UTs all over the country.

Extension Lecture Series

The institute organised three Extension Lectures via the virtual mode on 4 December 2020, 12 January 2021 and 16 February 2021. The lectures were delivered by eminent educationists namely, S.K. Soni, *Ex-Professor*, National Institute of Technical Teachers’ Training and Research, Bhopal; Raghu Pandey, *Senior Visiting Faculty and Consultant* in ICT; and Ajay Shukla, *Behavioural Scientist*; on the topics ‘Outcome based vocational education and NPE 2020’, ‘Digital citizenship and entrepreneurship’ and ‘Person, personality and effectiveness’, respectively. The lectures were attended by the faculty and staff of PSSCIVE, Bhopal, Regional Institute of Education, Bhopal, DVET students, teachers and key functionaries of States.

Orientation Programme for Candidates selected for One-year Diploma Course in Vocational Education and Training

The institute started its second session on Diploma in Vocational Education and Training Programme via the online mode. A total of 39 participants enrolled for the programme for the year 2020–21. An Orientation programme for the candidates selected for the one-year Diploma in Vocational Education and Training (DVET) programme for the academic year



Rajesh P. Khambayat, Professor and Joint Director, PSSCIVE, Bhopal, takes a session in the Orientation Programme



2020–2021 was conducted on 9 October 2020 through the online mode. The complete details about the DVET programme is available on the institute's website—www.psscive.ac.in.

Orientation Programme on Vocational Education for Key Officials of Gujarat

The programme was organised in virtual mode for better implementation of Vocational Education in Gujarat State. During the two-day programme, important sessions were held on employability skills, skill testing, teaching methods, lesson plan preparation, guidance and student support and job roles.



Orientation Programme on Vocational Education for key officials of Gujarat

Orientation Programme on Vocational Education for Principals and Teachers of Kerala

An orientation programme on vocational education for principals and teachers of Kerala was organised on 27 and 28 August 2020 in collaboration with the Department of General Education (Vocational Higher Secondary Wing), Government of Kerala. More than 600 principals and teachers participated in the programme. The topics covered during the two-day programme were— Overview of Vocational Education in Schools, Learning Outcomes based Curriculum, Re-imagining Vocational Education— NEP 2020, Vocational Pedagogy, Employability Skills, Assessment and Evaluation.

Celebration of the 27th Foundation Day of Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE), Bhopal

A national webinar on 'Re-positioning TVET Post-COVID-19: New Approaches and solutions' was organised on 6 July 2020 on the occasion of 27th Foundation



day of the institute. The institute established Vocational Laboratories for Retail, Travel and Tourism, Banking and Finance, Home Science, Automobile Technology, Health and Agriculture related vocations or job roles. These labs were inaugurated on the occasion of 27th Foundation Day of the institute.

Exhibitions

The institute participated in the exhibition ‘SARTHAQ Eduvision 2021 – A Fulfilling Experience’, a mega event for education, skill industry and allied sectors organised by Bhartiya Shikshan Mandal at the Academy of Administration, Bhopal, from 15 to 17 March 2021. The national expo of its kind in the country showcased the live demonstration of *Gurukul* System and the journey of education from time immemorial to the present day, various milestones achieved, and activities of different regions of India in educational and allied sectors. PSSCIVE exhibited its publications in the exhibition.

REGIONAL INSTITUTE OF EDUCATION (RIE), AJMER

Science, Mathematics, Geography and Environmental Education Theme Park for strengthening School Education Programme and sensitising Schoolchildren for generating Environmental Awareness by Prakriti Mela

Five online lectures on topics related to environmental education were organised to sensitise and create awareness amongst students of the Institute, including DM School. The topics are as follows.

- ❑ An online extension lecture on Climate Change (A long-term Perspective under Environment Education Theme Park by Manoj K. Pandit, *Professor*, University of Rajasthan, Jaipur, on 10 March 2021)
- ❑ An online extension lecture on the Importance of Biodiversity for the Survival of Mankind under Environmental Education Theme Park (by K.K. Sharma, *Professor*, MDS University, Ajmer on 12 March 2021.)
- ❑ An online extension lecture on Sustainable Agriculture: Future Perspectives and Challenges (by Bindu Sharma from the Department of Botany, University of Rajasthan, on 18 March 2021)
- ❑ An online extension lecture on The Role of Traditional Environmental Conservation in Livelihood and Conservation by Anil Kumar Changani, *Professor and Head*, Department of Environmental Science, MGS University, Bikaner, on 23 March 2021
- ❑ An online extension lecture on Conservation of Wildlife from a Common Man Perspective’ by Sanjeev Kumar, *Joint Director*, Zoological Survey of India on 26 March 2021.

Muskurata Bachpan: An Early Childhood Education (ECE) Programme

There were 20 children in Level 2/pre-primary 2. The activities for pre-academic, social development and play were conducted through the online mode. All 20 children have been promoted to Class I.

Extension Lectures

The programme was planned to invite eminent educationists to deliver extension lectures on different occasions, covering different aspects of education. Lectures through the virtual mode were followed by interaction between the audience and the speakers. The details are, as follows.



S.No.	Occasion/Topic	Name of the Speaker	Date of Lecture (Virtual)
1.	National Mathematics Day/ Mathematics for All	G. Ravindra, <i>Professor</i> and Former <i>I/c</i> <i>Director</i> of NCERT	22 December 2020
2.	Initiatives for implementing <i>National Education Policy</i> 2020 with reference to Higher Education	S. C. Panigrahi, <i>Professor</i> and Former <i>Head coordinator</i> UGC-CAS of M.S. University Baroda	23 December 2020
3.	Birth Anniversary of Swami Vivekananda	Umesh Kumar Chaurasia, RSBOE, Ajmer	12 January 2021
4.	National Science Day/ Nanotechnology: Past, Present and Future	Ashutosh Tiwari, <i>Professor</i> , Materials Science and Engineering, University of Utah (USA)	28 February 2021

Expression Series on Eminent Personalities

Birth anniversaries of eminent personalities were celebrated. Lectures and different activities were conducted for the students to apprise about the contributions made by eminent personalities towards nation building. Due to the COVID-19 pandemic, all activities were conducted through the virtual mode, wherein, scholars were invited to deliver lectures. Also, activities like painting, poster making, slogans, poem recitation, etc., were conducted.

Mathematics Lab at RIE, Ajmer

A mathematics laboratory is being developed in the institute for helping teachers conduct activity oriented classes. Various models are being prepared for learning mathematical concepts and theorems like Pythagoras Theorem, Interior Angles Property, relationship between cone and cylinder, etc.

Independence Day Celebrations

The Independence Day was celebrated on 15 August 2020 on the Institute's campus. Students and staff of the RIE and DM School enthusiastically participated in the programme. On the occasion, the Principal of the Institute S.V. Sharma, (*Professor*) hoisted the National Flag and addressed the gathering. A plantation drive was also organised.

Republic Day Celebrations

The Republic Day was celebrated on 26 January 2021 on the Institute's campus, in which the students and staff of the RIE and DMS participated enthusiastically. On the occasion, the Principal of the Institute S.V. Sharma, (*Professor*) hoisted the National Flag and addressed the gathering. A plantation drive was also organised.

National Science Day celebrations

The National Science Day was celebrated on 28 February 2021 to commemorate the discovery of Raman Effect through the virtual mode. On this occasion, an extension lecture on 'Nanotechnology: Past, Present and Future'; was delivered by Ashutosh Tiwari, *Professor*, Department of Material Science and Engineering, University of Utah, USA. Students and staff members of the Institute and DM School attended the function.



Internship Programme

As an integral part of the teacher education programme, prospective teachers of B.A.B.Ed., B.Sc.B.Ed. and B.Ed. are to be educated and trained for professional efficiency. All students of different pre-service teacher education programmes were placed in 18 schools of Ajmer, Rajasthan. During the programme, for the first two weeks, they were oriented about the need and importance of the internship programme and further they were oriented about various skills required in actual classroom situation. Then, they dealt with actual classroom situations both in offline and online mode from 8 February 2021 onwards. Their supervisors got the opportunity to observe how the students handled situations in the classroom. M.Ed. students were placed in the Government Institute of Advanced Studies in Education, Ajmer, and Haribhau Upadhyaya Teacher's College for Women, Hatundi, Ajmer, for internship and field attachment from 8 February 2021 to 6 March 2021.

Working with Community Programme

Working with community programme inculcates sensitivity among the students towards the society. It is a process of learning from the community like its customs and traditions, ways of living, usefulness of different government programmes and schemes running in that community, etc. The ten days' programme was organised by Regional Institute of Education, Ajmer, through the virtual mode. In this programme, 88 students of B.Sc. B.Ed. Part-II, and 45 students of B.A.Ed. Part II participated from 24 February 2021 to 4 March 2021 via the virtual mode with the objectives to make the students aware about the meaning and importance of community; make the students aware about meaningful relationship between community and education; develop the spirit of national integration, communal harmony and feeling of brotherhood among pupil-teachers; make the students aware about the Right to Education Act, 2009; provide information about the various skill development programmes being run by the government; provide basic knowledge related to first-aid; make the prospective teachers acquainted with the system of inclusion in classrooms; inculcate skills among pre-service teachers about the preparation of teaching-learning material by low-cost and no-cost material; and make the students aware about the various educational programmes and schemes run by the Central and State governments in rural areas.

Students were oriented about the different schemes and programmes concerned with school education and society like COVID-19 vaccination, *Swachh Bharat Abhiyan*, primary health centre, *anganwadi* and *balwadi* centre, Pre-Primary School, Mid-Day Meal Scheme, Government/NGOs and agencies working for Environmental Awareness, *Mahila Ashram*, Oldage home, Special Schools, Tribal Schools, Vocational Centres, NGOs working for Child Rights, *Ayushman Bharat*, *Ujjwala Yojana*, Indore *Rasoi Yojana*, *Jan Dhan Yojana*, Start Up India Scheme, MNREGA Scheme, teaching-learning process during the COVID-19 period, etc. During these programmes, students were suggested to interact with different organisations in their locality and collect data and information regarding the aforesaid programmes and schemes from their respective local areas (hometowns), keeping in view the government guidelines for COVID-19. The students submitted their reports at the end of the programme.



REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Resource Centre for Arts and Crafts at RIE, Bhopal

Under the Art Resource Centre, RIE, Bhopal, develops awareness about traditional arts, crafts, dances and folk music of the Western Region of India. More than ten workshops were organised for the development of traditional art forms by inviting grass-roots level artists, craftsman and art workers. The main objectives of the Resource Centre are to provide opportunities and arts resources to students, teachers and teacher-educators to explore, experience and understand arts and crafts. It promotes local and regional art forms and helps in bringing it into the formal education system.

Science Park and Weather Station

The STEAM (Science, Technology, Engineering, Arts and Mathematics) Park of Regional Institute of Education, Bhopal, has become the latest attraction and activity based Science Centre of the Bhopal Region. Earlier, the park was known as Science Park but now it has been renamed as STEAM Park to include more models on the STEAM theme. The park has a total of 45 exhibits and five artifacts from different areas of science, mathematics, technology and arts. Most of the exhibits in the park are interactive in nature and visitors can explore science in an entertaining way. Using waste material, several gadgets across fields like mechanics, sound and light, and artifacts that included animal structures like giraffe, duck, etc., were made.

Makerspace and Incubation Centre in Electrical and Electronics Lab

The RIE, Bhopal, has successfully converted the Electrical and Electronics Lab into a Makerspace Lab for providing a hub for innovation, invention, intervention, making, tinkering by using and giving shape to ideas and solving local and global problems using technology. It is expected that these Makerspace Lab will play the role of incubators of ideas and inspire the young students of the Western Region.

Organisation of Extension Lecture Series

Schools are a miniature society. They reflect the kind of social structure we have in society. Therefore, society and education should complement each other. There are many new pedagogies coming up in teaching-learning process. Along with new pedagogies, we also need to look into the traditional pedagogies to bring the best from the past in the teaching-learning process. There is a need to initiate dialogue among educational functionaries on new trends as well as national priorities in school education and teacher education accordingly.

Keeping this in mind, the Extension Lecture Series Programme was taken up by Regional Institute of Education, Bhopal. Under the Extension Lecture Series programme, two lectures were organised in the Institute. The first lecture was delivered by Renu Nanda, *Professor*, University of Jammu, Jammu Tawi (Jammu and Kashmir) on 23 November 2020 through the online mode on 'Reflective Perceptions on Teacher Education Curriculum'. The second lecture was delivered by U.C. Vashishtha, *Former Professor*, Lucknow University, on 13 January 2021 at RIE, Bhopal on 'Education as a Discipline'. Faculty members of RIE, Bhopal and staff of DM School participated in the discussion.



The discussions on 'Reflective Perceptions on Teacher Education Curriculum' and 'Education as a Discipline' had opened a new window to discuss new dimensions and aspects of Teacher Education Curriculum and Education as a discipline in the context of NEP 2020.

'Expression Series' to commemorate the Life and Works of Great Thinkers and Other Important Events

Education has a great social importance, especially, in modern, complex and industrialised societies. Philosophers of all periods, beginning with ancient times, devoted to it a great deal of attention. Education acts as an integrative force in the society by communicating value, that unite different sections of society. The family may fail to provide the child the essential knowledge of social skills and values of the wider society. Accordingly, various theories regarding its nature and objective have come into being. Some of the significant functions of education are— to complete the socialisation process, and transmit the central heritage for the formation of social personality, reformation of attitudes, and occupational placement, conferring of status. Besides, it aims to encourage the spirit of competition, train skills that are required by the economy and foster participant democracy. Thus, education acts as an integrative force. Therefore, it is necessary to acquaint the learners with the ideas and thoughts of great thinkers in education. In order to provide the right perspective on the thoughts of great personalities, discussions and deliberations were organised under Expression Series. Different activities and competitions like poster, dance, drama, skit, one-act play, debate, essay, *shram-daan*, etc., were also organised on the birthdays of following personalities in order to help the students internalise or realise their thoughts.

1. Life, Philosophy and Contribution of Dr. S. Radhakrishnan
2. Life, Philosophy and Contribution of Mahatma Gandhi and Lal Bahadur Shastri
3. Life, Philosophy and Contribution of Sardar Vallabhbhai Patel
4. Life, Philosophy and Contribution of Maulana Abul Kalam Azad
5. Life, Philosophy and Contribution of Swami Vivekananda
6. Life, Philosophy and Contribution of Dr. C.V. Raman
7. Life, Philosophy and Contribution of Baba Saheb Ambedkar

Apart from these, the Mother Language Day and the International Women's Day were also celebrated.

National Conference on Mathematics Education

The 9th National Conference on Mathematics Education was held at RIE, Bhopal, on 20–22 December 2020 to provide some workable solutions guided by experience and theory to attain the goals of NEP 2020. There were deliberations on considering various aspects of learning and the learner in respect of Mathematics to ultimately help construct mathematical knowledge by the learner in and outside the classroom in the fast-changing technological advancements. These deliberations aimed to provide a challenging opportunity for Mathematics Educationists, Teachers and Researchers to share their



thoughts, experiences, and research studies and make scholarly contributions towards improving the teaching and learning of Mathematics. These also aimed to pave the way for the development of innovative curriculum, textbooks, pre-service, and in-service teacher education programmes, etc.

The major objectives of the conference, *inter-alia*, were: to nurture the thinking skills of a child in mathematics; to promote mathematical approaches in School Education for improving students' innovative ability; to provide an integrated approach for improving teaching and learning; to identify different perspectives to understand the link between other disciplines; to improve the comprehensive use of mathematical knowledge; to solve practical problems; to promote creativity, critical thinking, problem solving skills, and decision-making ability through mathematics education; to encourage and share research and development through mathematical approaches; to encourage children to learn and enjoy mathematics, pose significant problems, and create logical thinking.

As many as 892 participants got registration for participation from the UK, Sharjah, Abu Dhabi, Bangladesh, Nepal, the Philippines, Indonesia, Sudan, Uganda, Morocco, Rwanda, Saudi Arabia and India. In this conference, there were five common sessions (three keynote/key talk, one workshop on 'Use of Mathematics Learning Resources and Mathematics Kit' prepared by NCERT and one panel discussion on *National Education Policy 2020* with reference to Mathematics Education) and 20 Technical Sessions where five parallel sessions in four cycles were conducted. In this conference, a total of 166 papers were presented under six themes.

1. Connecting Past with Present Mathematics Education
2. Mathematics Learning— Issues and Concerns
3. Contemporary Pedagogical Approaches in Mathematics Education
4. Assessment in Mathematics Education
5. ICT Integration in Mathematics Learning
6. Best (Innovative) practices in Mathematics Education

National Conference on Integration of STEAM in School Education

The conference was started on 26 February 2021 on Friday by the inaugural function, where NCERT *Director (I/c)*, Sridhar Shrivastava, was the Chief Guest of the inaugural function. The conference was conducted in collaboration with the Department of School Education, Government of MP. There was a keynote address by Manish Jain on hands-on learning on 26 February 2021. In the afternoon, technical session was started with five parallel technical sessions presented on various themes. There were nine themes in totality. On the first day, there were 35 out of 36 presentations. Day two began with the keynote speech of Sugra Chunavala, *Professor and Dean* of HBCSE, TIFR, Mumbai. She delivered a speech on STEM to STEAM. There were parallel sessions both in the afternoon and forenoon. Day three began with the keynote address by Saptarishi Mukherjee, *Professor in Chemistry, IISER, Bhopal*. He spoke on 'Modern Indian Science: Thinking beyond the Conventional'. The National Science Day was also observed the same day. There were five Technical Sessions. There was a competition for coding as well at various levels and



first, second and third prizes were awarded. Students who participated in the coding competition shared their experiences virtually. Feedback was given by one of the participants. Participants of the National STEAM Conference also shared their experiences.

International Seminar on Teacher Education in the 21st Century: Vision and Action

The International Seminar was organised from 8 to 10 March 2021 via the online mode by the Regional Institute of Education, Bhopal, with the objective to explore local and global scenario of teacher education; explore possible ways and means for content, pedagogy and technology integration in teacher education; share innovation and best practices in the field of teacher education; have exploration or in-depth research-based experiences and case studies; and evolve a viable and contextualised model of teacher education for the 21st century.

The conference received more than 350 papers, out of which 158 papers were selected and around 115 papers were presented on the major themes: (i) Teacher education; Global to Local, (ii) Making of 21st Century Teachers and Teacher Education, (iii) Continuous Professional Development of Teachers and Teacher Education, (iv) ICT Integration in Teacher Education, (v) Discipline Integrated Teacher Education: Prospects and Future, (vi) Innovation, Best Practices and Researches in Teacher Education and (vii) Teacher Education of Special Group of Learners.

National Seminar on Emerging Trends and Issues in Learner Assessment at the School Level

The National Seminar was organised from 24 to 26 November 2020 via the online mode by Regional Institute of Education, Bhopal, with the objectives to deliberate on the practices of learner assessment through historical lens; reflect upon the current practices of learner assessment in basic school subjects; evolve strategies of learner assessment in other curricular areas; view assessment from holistic perspective; promote integration of ICT in learner assessment at school level; and promote research in the areas of learner assessment.

The conference received more than 290 papers, out of which 140 papers were selected and around 121 papers were presented on the major themes: (i) Learner Assessment: Retrospect and Prospects, (ii) Assessment of Learner in Basic School Subjects: National and International Scenario, (iii) Assessment in Other Curricular Areas, (iv) Holistic Assessment, (v) ICT and Learner Assessment, (vi) Current Trends in Assessment at the School Level, (vii) Research Trends in Areas of Learner Assessment and (viii) Ethical Considerations in Learner Assessment.

Internship in Teaching Programme

Internship in teaching programme for B.A.B.Ed., B.Sc.B.Ed. VII semester and 3-year B.Ed.M.Ed. (Integrated) courses was organised via the online mode. A total of 142 students were placed in KVs, JNVs and schools of different States like Madhya Pradesh, Odisha, Gujarat, Chhattisgarh and Maharashtra to gain the picture of teaching profession through the online mode. Some of the students were also engaged in community teaching.



The objectives of the programme are to provide the students with the overall teaching experience for future. This programme also offers to look into the challenges and problems of real life classroom situations. It gives the opportunity to the learners to gain experience in the field of teaching. Due to the pandemic, the students did internship— 14 weeks for B.Ed.M.Ed. and 22 weeks for B.Sc.B.Ed. and B.A.B.Ed. students, through online classes which provided them with a different kind of teaching–learning experience.

REGIONAL INSTITUTE OF EDUCATION (RIE), BHUBANESWAR

Celebration of the International Mother Language Day

The International Mother Language Day is celebrated every year on 21 February. The main purpose of the celebration is to promote the mother tongue, and celebrate India’s rich cultural diversity and multilingualism. The celebration was held at Regional Institute of Education, Bhubaneswar, on 21 February 2021. Abasar Beuria, Former Indian diplomat, was the Chief Guest of the programme, who spoke on the education and mother tongue. The RIE students spoke on the importance of Mother Language Day. Following which, P.C. Agarwal, *Professor and Principal* expressed his views on mother tongue and the importance of celebrating the Mother Language Day.

Celebration of the National Science Day

The National Science day was celebrated at RIE, Bhubaneswar, on 28 February 2021. On this occasion, Dr. P.K. Sahoo, renowned cardiologist at the Apollo Hospital, Bhubaneswar, addressed the students and faculties on cardio-vascular diseases and associated lifestyle management.

Extension Lecture Series

The following nine Extension Lectures were delivered by eminent educationists on specific themes through the virtual mode. There are as follows.

S.No.	Topic	Name of the Speaker	Venue and Date
1.	Enduring Legacy of Netaji Subhash Chandra Bose and Contemporary Challenges to Nation Building and National Integration	Satyanarayana Sahu, <i>Former Press Secretary to the President of India</i>	Virtual Mode 23 January 2021
2.	Message of Swami Vivekananda to the Youth	Swatantra Sharma, <i>State Training Head, Vivekananda Kendra, Kanyakumari</i>	Virtual Mode 12 January 2021
3.	Limitations of Concept of Special Schooling towards an Innovative Framework Educating Differently Abled Children	Sanjeev Kumar, <i>Professor, University of Delhi</i>	Virtual Mode 12 December 2020



4.	Education and Culture in the Country	Ashok Nagawat, <i>Professor</i>	Virtual Mode 11 November 2020
5.	National Unity Day and Vigilance Awareness	Narottam Gan, <i>Professor,</i> Indira Gandhi National Tribal University	Virtual Mode 31 October 2020
6.	<i>National Education Policy</i> 2020 School Education	Ramachandran, <i>Professor and Senior Advisory,</i> Unit of International Cooperation, NIEPA	Virtual Mode 11 November 2020
7.	Significance of Gandhian Philosophy Today	J. N. Das, <i>Professor</i>	Virtual Mode 2 October 2020
8.	Fundamental Rights and Fundamental Duties	Amareswar Mishra, Retd. <i>Professor,</i> Utkal University	Virtual Mode 26 November 2020
9.	Character Building and Holistic Personality Development	Desh Raj Sharma, <i>National Convenor,</i> CBPD, SSUN, New Delhi	Face-to-face mode 30–31 March 2021

Internship for B.Ed. Semester III and B.Sc. B.Ed. and B.A.B.Ed. Student-teachers

The internship was organised in three phases, — pre-internship, internship and post-internship. The pre-internship workshop for student-teachers was held through the online mode during September 2020. Due to the COVID-19 pandemic situation, the school internship was also organised through the online mode. The activities were contextualised and alternative activities were developed. Ninety-eight student-teachers from Arts and Science streams were placed in different Secondary Schools of the Eastern Region of the country. The student-teachers were involved in different activities, such as observation of online classes of cooperating teachers, online peer observation, unit plan and lesson plan, online teaching, conducting action research, developing e-content or materials and achievement test and maintaining reflective diary, etc. Post-internship programme was held at the institute from 9 to 11 December 2020 for sharing innovation, challenges and experiences.

For the internship in teaching programme of B.Sc. B.Ed., B.A. B.Ed. and 2-year B.Ed., alternate guidelines for teaching was prepared taking into consideration the COVID-19 situation. A ten-day Pre-internship Conference was held from 21 September to 30 September to appraise students about various activities to be completed by them as per the alternate guidelines. After the Pre-internship Conference, 250 students from B.Sc. B.Ed., B.A. B.Ed. and 2-year B.Ed. were placed in various schools of Jawahar Navodaya Vidyalaya Sangathan, Kendriya Vidyalaya Sangathan (KVS) and other government and private schools for the Internship Programme from September to December 2020.



All assignments were completed via the virtual mode. The critical reflections were recorded for improving Internship programme in future.

Multicultural Placement Programme of Pre-service Student-teachers

The objectives of the programme were to expose and provide school-based experiences to student-teachers during the initial year and to orient on school functioning and processes in multicultural context in selected schools. The programme comprised two phases of activities— School Exposure in the first semester and Multicultural Placement in the second semester. Both the school exposure and multicultural placement were further divided into three phases— (a) Pre-conference, (b) Exposure to the schools/Multicultural placement and (c) Post-conference. For the present sessions, both the school exposure and multicultural placement programmes were combined and conducted in the month of March 2021 due to the COVID-19 situation. It was conducted in selected schools of Bhubaneswar, Odisha, wherein, 108 B.Ed. 1st year students were placed at private and Government schools to experience and understand the culture and functioning of 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 programme, activities like observation and 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. Multicultural placement programme had activities like observation, case study, substitute teaching and 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 an integral part of community. All experiences were shared by student-teachers as a part of feedback to improve the programme.

In order to provide school exposure in various cultural backgrounds, sixth semester students of 4-year integrated courses B.A.B.Ed. and B.Sc. B.Ed. are placed in different types of schools. This year, RIE, Bhubaneswar, organised the programme from 17 to 31 March 2021. During the programme, the student-teachers were exposed to different types of schools, such as private public schools, private value based schools and government schools. Various activities as per the syllabus were carried out by the student-teachers during the programme. Prior to the programme, one-day Orientation Conference of 16 Co-operating school teachers and all students was carried out. The students were divided into eight groups and allowed to visit different schools on rotation basis. After the completion of the programme, a post-multicultural placement conference was also organised for sharing the experiences and activities of the students during the period of placement.

Working with the Community

The student-teachers often find it challenging to adapt themselves in real learning situations after being appointed as teachers. They face difficulties in carrying out innovative practices during teaching-learning process, which may be due to the lack of community participation. In order to make student-teachers aware of the socio-cultural, educational, economical issues



and problems related to the society and prepare them as teacher-practitioners, community experiments were taken up as a part of the course.

In order to provide community experiences to the B.Sc.B.Ed. student-teachers of RIE, an eight-day field work with community programme was organised in local slum areas. The student-teachers of the Institute were engaged in activities like educational survey of the village, case study of the families, awareness programmes on literacy, sanitation and HIV-AIDS through the cultural programmes, such as *Nukkad Nataks*, *Shram Daan* and the *Swachha Bharat* campaign, etc.



Pre-school Education in Demonstration Multipurpose School

The objective of the programme was to plan and implement developmentally appropriate practices for pre-school children. Twenty-five students each in lower pre-primary and upper pre-primary classes were admitted on the basis of random selection. Two teachers were selected from the previous year list. The teachers were oriented on developmentally appropriate practices. Weekly action plan and corresponding activities, i.e., physical development, language development, socio-emotional and cognitive development were developed for implementation of the programme. A format on developmental profile of students was developed depicting developmental characteristics of pre-schoolers. Due to the COVID-19 pandemic, interaction sessions were arranged with parents through the online mode. Materials and activity sheets were shared with parents for use by children. The online facilitation to parents



and pre-school children were organised. The parents were oriented on pressures on pre-schoolers, promoting an enabling environment at home, play and early education, assessing young children and other relevant areas. The programme was evaluated by collecting feedback from parents, team members and children. The reflections of parents, teachers and team members revealed the provision of more facilities and resources.

REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

Celebration of the National Education Day

On the occasion of the National Education Day on 11 November 2020, D. Kumaran, *Retired Dean* of Education, University of Madras, delivered a lecture on 'Quality Education in Global Perspective'. The key areas identified and discussed on meeting global needs and expectations in Teacher Education were Rich Subject Content, wider choice of subjects of varied kinds, opportunities to learn additional foreign languages, opportunities to understand cultural and social aspects of countries in the world, which need to be upgraded quality-wise in terms of enriched academic, cultural and social aspects. Curricular aspects, teacher learning and evaluation, research and outreach activities, infrastructure and learning resources, student support and progression, governance, leadership and management, institutional values and best practices, are some of the indicators that were discussed for assessing Teacher Education.

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

The Diploma Course in Guidance and Counselling 2020 batch of the programme started from 1 January 2020, admitting 50 candidates from the Southern region. An Induction programme was organised during the second week of February. The Distance Learning Phase continued up to June 2020. From July to October 2020, the online Contact Programme was organised in which 39 candidates participated. From October to December 2020, these 39 participants were involved in completing their Internship in the selected schools. The participants were enriched and equipped to be finetuned in Career Counselling.

National Science Day Celebrations

In order to popularise science and create awareness about recent scientific developments, the National Science Day was celebrated by RIE, Mysuru, from 19 to 26 February 2021. K.S. Rangappa, *Professor, CSIR Emeritus Scientist, and Former Vice-Chancellor* of Karnataka State Open University (KSOU) delivered a lecture on 'Future of Science and Technology Innovation (STI): Impacts on Education, Skills and Work'. Also, various activities like writing competition for school students on 'Science behind daily life activity', website designing competition for students of Classes VIII-IX, school science quiz for Classes VIII and IX, paper presentations on 'Science and technology innovations' and exhibitions on 'Science and technology innovations' were conducted.

Internship Programme

Due to the COVID-19 Pandemic situation, the internship programme, usually, carried out in the offline mode in residential schools was converted into online



mode except post-internship conference. The objectives were to bring about a real integration of theory and practice in education and training of the student–teachers; develop the student–teachers to apply principles, enabling them to suit the needs and conditions of the changing situations; develop in student–teachers the desirable competencies of a good and successful teacher; develop the ability to define clearly the general and specific objectives of teaching a specific concept, etc.

The student–teachers were able to complete their teaching–learning programme successfully. The orientation programme helped the cooperating teachers and student trainees to understand the essence of the internship. The post-internship conference helped the organisers identify the difficulties and advantages of online internships for further improvement.

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

National Seminar on Issues and Challenges in Minority Language Education

A National Seminar on Issues and Challenges in Minority Language Education was organised via the online mode from 23 to 25 November 2020. The seminar provided a forum for sharing the experiences, challenges and realities that came across on the issue of Minority Language Education, including the sign languages in the North East. Ramakant Agnihotri, *Professor*, was the keynote speaker of the seminar. Altogether, there were 39 papers, which delved into the issue of mother tongue education across the country. The seminar recommended for the documentation of all languages of North East, the lives and culture of the people, their ecological situations, abandoning the idea of single medium of schools (English Medium schools should work out plans to include minority language), narrowing down the number of languages available in India by conscious mapping, standardisation of orthography, development of teaching–learning material, conduct of a linguistic survey and mapping, conducting child language census, ensuring community school linkages, establishment of school museums, etc.

World Population Day Celebrations

The World Population Day was celebrated on 11 July 2020 by organising a webinar on the topic ‘Adolescents: Challenges and coping in the COVID-19 times’. Dr. Sonali Shinde, *Consultant Psychiatrist*, Mind and Wellness Clinic, Shillong, and Saptarshi Majumdar, *PGT*, KV (CRPF), Amerigog, Guwahati, and also a former DCGC student, were the panelists. Students, teachers and teacher–educators across North East States joined the webinar. The session was interactive as a large number of students participated who had the anxiety of getting infected by the deadly virus COVID-19.

Celebrations on the 150th Birth Anniversary of Mahatma Gandhi

The 150th Birth Anniversary of Mahatma Gandhi was celebrated at NERIE, Umiyam, on 2 October 2020 via the online mode with a talk on ‘Work as a Pedagogical Medium: Gandhian Framework of Transformative Education’ by Surjit Singh Thockchom, *Founder Director*, Synroplang, for Social Transformation, a Shillong based NGO. His talk was centred on the philosophies



under *Nai Talim* and its relevance to the present day society. The programme was attended by the Faculty Members and students of NERIE.

International Mother Language Day Celebrations

The NERIE celebrated the celebrations Mother Language Day on 21 February 2021 via the online mode. Awadesh Kumar Mishra, *Former Director*, Central Institute of Indian Languages (CIIL) and *Professor* in Linguistics, EFLU University, delivered a lecture on 'Language Education and Culture in Multilingual Societies'. The programme was attended by all Faculty Members and students of the Institute.

International Women's Day Celebrations

The NERIE, Umiam, celebrated the International Women's Day on 8 March 2021. It organised an online lecture in the morning session on the topic 'Women in Science and Technology: Education to Employment' by Dr. Madhu Dikshit, FNA, FNASc, FASc, J.C. Bose, *National Fellow*, THSTI National Chair and *Former Director*, CSIR— Central Drug Research Institute, Lucknow. The programme was followed by a short video on 'Inspiring Indian Women Achievers' and an essay writing competition for B.Ed. students on the topic 'Inspiring Women Achievers of the North Eastern States of India'.

Extension Lecture

As part of the celebration of the National Science Day, an Extension Lecture was organised at NERIE, Umiam, on 28 February 2021. Alak Kumar Buragohain, *Professor* and *Former Vice Chancellor*, Dibrugarh University, Dibrugarh and *Chairman (Academic)* Royal Global University, Guwahati, Assam, delivered a lecture on 'Future of STI: Impact on Education, Skills and Work'. The main objective of the National Science Day is to generate awareness about the importance of science in daily life and encourage people by popularising Science and Technology. Delivering the lecture, Professor Buragohain remarked that 28 February is observed as the National Science Day in India as on this day, world renowned scientist Sir C.V. Raman invented the 'Raman Effect' in 1928. He won the Nobel Prize in Physics in 1930 for the historic invention. It was a very important invention which paved way for innumerable future developments in the scientific world. He called upon the youth to dedicate their life for a future with education, skills and work in Science and carry forward the legacy of Sir Raman in Science, Technology and Innovations. Students, teachers, teacher-educators and people in the field of science joined the session and interacted with Professor Buragohain.

DEMONSTRATION MULTIPURPOSE SCHOOL

Students' enrolment in Demonstration Multipurpose School for the Session 2020-21 is as follows.

S.No.	Class	Ajmer	Bhopal	Bhubaneswar	Mysuru
	Pre-primary	-	-	51	-
1.	I	35	68	70	69
2.	II	34	62	70	68
3.	III	35	67	68	70
4.	IV	34	70	69	70



5.	V	36	70	70	69
6.	VI	70	71	104	69
7.	VII	68	69	104	69
8.	VIII	71	72	102	69
9.	IX	69	72	101	68
10.	X	70	65	102	66
11.	XI	83	88	105	23 33
12.	XII	90	77	105	22 24
Total		695	851	1121	1121

Result for the Session 2019–20 for Classes X and XII of DM School

Class	RIE, Ajmer		RIE, Bhopal		RIE, Bhubaneswar		RIE, Mysuru	
	Appeared/ Passed	Pass Percentage	Appeared/ Passed	Pass Percentage	Appeared/ Passed	Pass Percentage	Appeared/ Passed	Pass Percentage
X	57/56	98.24	–	–	99/99	100	69/65	94.20
XII Science	22/20	90.91	23/23	100	62/62	100	30/30	100
XII Humanities	30/30	100	27/27	100	20/20	100	33/31	94
XII Commerce	24/23	95.83	17/17	100	17/17	100		

Major Achievements of Demonstration Multipurpose School, Ajmer

Sports and Extracurricular Activities

Fit India School Week

The Fit India school week 2020 was observed via the online mode by DM School, RIE, Ajmer from 14 to 19 December 2020. Activities like Free hand exercises and Fun and Fitness— Aerobics, Dance forms, Rope Skipping, Hopscotch, and Shuttle Running, Yoga, Brain Games; and Essay/Poem Writing Competition on the theme 'Fitness Beats Pandemic', fitness activities (virtual challenges) and Online Quiz, etc., were conducted.

Pariksha Pe Charcha

The year 2021 will mark the fourth edition of *Pariksha Pe Charcha*, the Unique Interactive Programme, wherein, Hon'ble Prime Minister, Shri Narendra Modi, will address school students, teachers and parents. It will be held through the virtual mode adhering to the COVID-19 protocol. The programme will be aired on TV channels and digital media platforms in Hindi and other major Indian languages. The event will be organised by the Department of School Education and Literacy, Ministry of Education, with active involvement of



States and UTs. Demonstration Multipurpose School's Secondary and Senior Secondary students, parents and teachers will participate in the *Pariksha Pe Charcha* 2021 through the online mode.

Major Achievements of Demonstration Multipurpose School, Bhopal

- ❑ Bong Kil Shin, *Ambassador* of the Republic of Korea to India, Korean Embassy, inaugurated Mechatronics Lab of DMS, Bhopal, during his visit from 16 to 18 December 2020. Beauty and Wellness is a new vocational course for students.
- ❑ Aviral Tiwari of Class XII and Amber Jain of Class XII participated in the *Hindi Lekhika Sangh* organised by Hindi Lekhika Sangh, Madhya Pradesh, on 20 December 2020 and won the first and the third positions respectively, in the poem recitation competition.
- ❑ On the occasion of the 157th Birth Anniversary of Swami Vivekananda, an elocution programme on '*Mai bhi Vivekananda banna chahta hoon*' was conducted via the online mode by RIE, Bhopal, on 12 January 2021. Amber Jain of Class XII, Vishanshu Rajak of Class X, and Kripa Talreja of Class IX got first, second and third positions, respectively.
- ❑ On 17 January 2021, a team of 25 participants from IES College visited all the vocational labs of DMS, Bhopal. On 21 January 2021, school teachers and principal of M.P. Government School visited three vocational labs of DMS, Bhopal. Time-to-time consultancy and expert advice was provided to all students by vocational teachers.
- ❑ Fit India School Week activities were observed by DM School, Bhopal from 14 to 19 December 2020, adhering to the Guidelines of Prevention of COVID-19. Several activities like brain games, yoga, poem recitation, essay writing, squad, painting competitions, etc., were organised via the online mode. As per the directions of the Ministry of Youth Affairs and Sports, Government of India, different activities were organised as per the day-wise schedule from Classes VI to XII. Various sports competitions like push-ups, *Surya Namaskar*, skipping, sit-ups, squads, etc., were organised from 6 to 10 February 2021.
- ❑ Teachers of DMS contributed in the development of e-Content for PM eVidya channels.
- ❑ Shruti Adhikari, PGT (Music), performed *Santoor Vaadan* on 25 February 2020 at Hyderabad House, Delhi, in front of Donald J. Trump, the *President* of USA and Shri Narendra Modi, *Prime Minister* of India. She was appreciated by them for her performance. On 6 March 2020, she performed with the famous Indian folk band named Indian Ocean on *Namaste Orcha* programme which was organised by the Madhya Pradesh Tourism Department at Orcha on 6 March 2020.

Major Achievements of Demonstration Multipurpose School, Bhubaneswar

The school celebrated and observed National festivals— Republic Day, Independence Day and many other important days like Teacher's Day, *Hindi Pakhwada*, Constitution Day, Babasaheb Bhimrao Ambedkar Jayanti, Yoga Day, Vigilance Awareness Week, Fit India School Week.



Independence Day Celebrations

Schools celebrated the Independence Day addressing the aspects of National Integration, *Swachh Bharat Mission* and *Atmanirbhar Bharat* through Essay, Poster Making and Painting Competitions held online for students of various categories.

Babasaheb Bhimrao Ambedkar Jayanti Celebrations

The schools celebrated the Babasaheb Bhimrao Ambedkar Jayanti on 14 April 2020 by conducting online essay and poster making competition for students of various categories. The topics of the competitions were 'Writing Preamble of the Constitution of India', 'Dr. B.R. Ambedkar: The Architect of Indian Constitution' and 'Promoting India's Rich Composite Culture for Universal Brotherhood'.

National Yoga Day Celebrations

The school celebrated the 'National Yoga Day' on 21 June 2020, where NCERT launched the Yoga Online Quiz Competition for junior, secondary and senior secondary school students where all the students. A large number of students participated in the programme.

Vigilance Awareness Week Celebrations

The school celebrated the Vigilance Awareness Week by conducting online Speech Competition for students. The topics were: 'Honesty is the Best Policy' for Primary Category, 'Role of Education in Combating Corruption' for Junior Category and 'Vigilance – An Antidote to Corruption' for secondary and senior category.

Constitution Day Celebrations

The school celebrated the Constitution Day by organising online poster making and speech competitions on the topics— 'Various Aspects of the Constitution' and 'Fundamental Duties and Fundamental Rights' respectively.

Fit India School Week Celebrations

The school celebrated the Fit India School Week by conducting virtual activities on fitness, conducting poster making competition on 'Hum Fit to India Fit' or 'New India Fit India'. Essay writing competition on the theme 'Fitness Beats Pandemic' was also conducted for students.

Pariksha Pe Charcha

The school will participate in the *Pariksha Pe Charcha*, a Unique Interactive Programme, where Hon'ble Prime Minister, Shri Narendra Modi will address students, teachers and parents. As a part of it, the school has conducted creative writing and painting competitions on Mygov.in. The topics of creative writing competition for students were: '*Exams like festivals celebrate them (painting), India is incredible, Travel and explore, As one journey ends another begins, Aspire, Not to be, But to do and Be grateful*'; for teachers: '*Online education system— Its benefits and how it can be improved further*'; and for the parents: '*Your words make your child's world—encourage, as you have always done and be your child's friend—keep depression away*'.



Major Achievements of Demonstration Multipurpose School, Mysuru

- ❑ The school celebrated the birth anniversary of Hockey wizard, Dhyan Chand, The National Sports Day was celebrated on 29 August 2020 which served as a timely reminder for the need of sporting activities in life.
- ❑ The NCC cadets and NCC Officers of Demonstration School participated in FIT India 2020 in the month of September 2020.
- ❑ Teacher's Day was celebrated in Demonstration School on 05 September 2020 to commemorate the birth anniversary of Dr. S. Radhakrishnan.
- ❑ The school celebrated the Constitution Day on 26 November 2020 in which N.N. Prahallada, *Former Professor* in Education, RIEM, delivered a talk on Fundamental Duties and Fundamental Rights for students of DMS through a webinar.
- ❑ The students and teachers of the Demonstration School actively participated in the inaugural function of *Matrubhasha Diwas* on 21 February 2021 through a webinar in which the Hon'ble Vice President of India was the Chief Guest.

REGIONAL INSTITUTE OF EDUCATION (RIE), MYSURU

Independence Day Celebrations

The Independence Day was celebrated on 15 August 2020. Y. Sreekanth, *Professor* and *Principal*, RIE, Mysuru, as the Chief Guest, took the guard of honour from the students of DMS and RIE, Mysuru. After hoisting the National Flag, he addressed the students and explained the supreme sacrifices of Freedom Fighters of India. He also spoke about 'unity in diversity' which is the foundational value of India. The students of RIE and DMS sang patriotic songs in the regional languages.

Republic Day Celebrations

The Republic day was celebrated on 26 January 2021. Y. Sreekanth, *Professor* and *Principal*, RIE, Mysuru, as 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. He also spoke about the various States and the way they were formed and about the important role of Sardar Vallabhbhai Patel and Bhimrao Ramji Ambedkar in the unification and codification of the Nation. The students of RIE and DMS sang patriotic songs in the regional languages.

Celebrations of the 58th RIE-Mysuru Foundation Day

On the occasion of the 58th RIE Foundation Day, 1 August 2020, M.K. Shridhar, *Professor* and *Dean*, Management Studies, Bangalore University, delivered Sardar Panikar Memorial Lecture on 'Education beyond subjects and disciplines'. He talked about the NEP and its intricacies in terms of school education, 5+3+3+4 model and FLN and its usefulness for the country.



Teacher's Day Celebrations

As a part of the celebration of Teacher's Day, a panel discussion on NEP and an online poster painting competition on the theme 'My teacher my hero' for students of RIE, Mysuru, was conducted.

Celebrations of Mahatma Gandhi's 150th Birth Anniversary

Mahatma Gandhi's 150th birth anniversary was celebrated on 2 October 2020. Sivarajappa, *Professor and Director*, Oriental Research Institute, Mysore, delivered a lecture on 'Gandhi and his views on education'. The significance of Gandhian thought and its application in modern world was discussed. He emphasised the seven sins depicted by Mahatma Gandhi. He reminded the gathering that the only weapons Gandhiji possessed were truth and non-violence, which had no history of being used as potent forces against the mighty political and economic powers. He targeted the welfare of the entire population through espousing the concept of *Sarvodaya*, Gandhiji's own version of socialism.





8. Major Schemes of the MoE coordinated 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 MoE entrusts the Council to implement its various schemes/projects that are related to school and teacher education approved by Programme Approval Boards (PABs) of the MoE. Different constituents of NCERT are assigned the responsibilities to implement the scheme effectively. During the year 2020–21, the Council implemented the following schemes.

MAJOR SCHEMES

National Population Education Project (NPEP) and the Adolescent Education Programme

The National Population Education Project (NPEP) and the Adolescent Education Programme (AEP) are being implemented by the NPEP unit of the Department in 36 States/UTs. The programme includes concern for adolescents as an important component. The implementing and coordinating agencies are KVS, NVS and NCERT. Presently the NPEP has given much focused attention to the School Health and Wellness Programme under the *Ayushman Bharat* initiative of the Government in collaboration with the Ministry of Health and Family Welfare. For the purpose of implementing the programmes across the States/UTs, a lot of materials have been prepared in both English and Hindi. They include modules, charts, e-materials and small videos. Many of the States have also contributed in taking up research studies especially regarding the issues and concerns of adolescents.

Periodic and annual meetings are organised under NPEP and AEP to review the status of activities planned by the implementing agencies and to prepare the Annual Work Plan of AEP and Plan of Action of NPEP for the next year in which the officials from the implementing States/UTs and National agencies—KVS, NVS, NCERT and UNFPA participated. The institutional mechanism called Project Finance and Monitoring Committee discusses and approves the Plan of Action of NPEP and the Annual Work Plans of AEP.

Celebration of the International Yoga Day

During the pandemic, the department contributed in celebrating the International Yoga Day on 21 June 2020, wherein, the quiz on yoga was organised. The online quiz was opened for students from 21 June 2020 and went till September 2020. A total of 8,07,992 students participated in this online quiz out of which 7,47,718 participated in English and 60,274 in Hindi. Around 100 students secured merit position in the online yoga quiz.

NATIONAL TALENT SEARCH EXAMINATION 2020

Summary of candidates selected for the award								
S. No.	State Code	Name	General	OBC	SC	ST	EWS	Total
1.	11	Arunachal Pradesh	0	0	0	3	0	3
2.	12	Assam	4	0	4	7	0	15
3.	13	Manipur	0	0	0	0	0	0
4.	14	Meghalaya	0	0	0	0	0	0
5.	15	Mizoram	0	0	0	3	0	3
6.	16	Nagaland	0	0	0	0	0	0
7.	17	Sikkim	0	0	0	0	0	0
8.	18	Tripura	0	1	1	0	0	2
9.	19	Andaman and Nicobar Islands	0	1	0	0	0	1
10.	20	Bihar	17	38	4	1	18	78
11.	21	Jharkhand	13	10	6	7	0	36
12.	22	Odisha	44	9	21	7	5	86
13.	23	West Bengal	35	3	24	2	0	64
14.	24	Chandigarh	9	0	1	0	0	10
15.	25	Delhi	53	23	13	8	0	97
16.	26	Jammu and Kashmir	1	0	3	0	0	4
17.	27	Haryana	62	41	19	0	13	135
18.	28	Himachal Pradesh	3	1	1	0	0	5
19.	29	Punjab	43	8	8	1	1	61
20.	30	Rajasthan	102	45	27	26	30	230
21.	31	Uttar Pradesh	68	50	18	5	23	164
22.	32	Uttarakhand	11	1	4	1	1	18
23.	33	Chhattisgarh	11	6	7	7	0	31
24.	34	Daman and Diu	0	0	0	0	0	0



25.	35	Dadra and Nagar Haveli	1	0	0	2	0	3
26.	36	Goa	4	0	0	0	0	4
27.	37	Gujarat	27	17	12	5	6	67
28.	38	Madhya Pradesh	39	29	18	14	19	119
29.	39	Maharashtra	80	79	47	18	41	265
30.	40	Andhra Pradesh	13	33	12	9	28	95
31.	41	Karnataka	93	34	24	13	1	165
32.	42	Kerala	14	18	4	4	2	42
33.	43	Lakshadweep	0	0	0	0	0	0
34.	44	Puducherry	1	3	1	0	1	6
35.	45	Tamil Nadu	42	100	32	2	0	176
36.	46	Telangana	28	18	7	9	12	74
37.	Abroad	Abroad	0	1	0	0	0	1
38.	99	Ladakh	0	0	0	0	0	0
Total			818	569	318	154	201	2060

Nurturance Programme for NTSE Awardees

The nurturance programme for NTS awardees mainly focuses on providing awareness and opportunities to the awardees to excel in the academic area of their interest by way of creating conducive situations for their growth and development. The nurturance programmes are mainly conducted for the awardees who are studying in Class XI. These are generally residential programmes of five days duration wherein awardees are given the opportunities to remain in institutes of high repute like IITs, IISERs, Universities, IISc, etc. The main objectives of the programme are to enable the awardees to develop their intellectual potentialities in the best possible way, to motivate the curiosity of awardees so as to stimulate their powers of creativity and research spirit, to enable the awareness to exchange views with their peers of similar calibre and to promote a greater understanding and appreciation of each other's academic views, to enable the awardees to develop new concepts in the field of their specialisation, to encourage the awardees to concentrate their academic interest for future pursuits to enable awardees to develop an understanding of the recent development in the subject area of their interest and to promote innovation, experimentation, and research in the area of their interest.

This programme for the awardees was conducted online from 22 to 26 March 2021. The topics covered in the programme were machine learning, linking nanotechnology, climate change and renewable energy using sustainable catalysis, vision and mission, strategic management, climate change, public policy, robotics club, a journey into science of fracture, optics and photonics, etc.



47th Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for Children 2020

The programme is conducted every year with the objectives to popularise science, mathematics and environment among students, teachers, teacher educators and masses, to make children realise the relevance of science to society and their responsibilities as scientists in the present age, to promote creativity, innovation and development of psychomotor and manipulative skills in children, to stimulate interest in science, mathematics and environment and to inculcate scientific temper in the students, teachers and masses and to collect feedback from participating children, teachers and public in general on the organisation of this activity.

The JNNSMEE is an annual programme of NCERT which is a culmination of a series of science exhibitions from school level onwards till State level. This event is held to generate scientific temper not only among students but also in the society as well. The selected exhibits received from the States are screened by experts in NCERT and are displayed in the exhibition. Every year it is held in collaboration with one of the States/UTs for which funds are also provided to them. This year, however due to the COVID-19 situation, this event was not organised.

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

The main objective of the programme is to provide a forum for children to pursue their natural curiosity, creativity, innovation and inventiveness. It is also to make children feel that science and mathematics are all around us and we can gain knowledge as well as solve many problems by relating the learning process to the physical and social environment.

In this programme, there are 44 different Organisations/States which take part in the exhibition. This year eight States organised the programme and submitted their selected exhibit to the Department of Education in Science and Mathematics.

Rashtriya Avishkar Saptah 2020

Under Ministry of Education, GoI in collaboration with the Department of Education in Science and Mathematics (DESM), NCERT, New Delhi has taken up a national programme '*Rashtriya Avishkar Saptah 2020*' in commemoration of one of the greatest motivators of present time in our country— Late Dr. A.P.J. Abdul Kalam from 15 to 21 October 2020 (October being the month of Dr. A.P.J. Abdul Kalam's birth anniversary) on the theme 'Water Auditing and Calculation of Carbon Foot-Print' considering the importance of judicious usage of water and in carbon emission reduction. During this week, all students at upper primary, secondary and higher secondary stages from three to five schools of each block across the nation, uniformly carried out a study as per the guidelines developed by DESM, NCERT. Around 6155 schools from 2705 districts of 29 States/UTs covering 4190 rural (66.07%), 1620 urban (26.49%) and 345 semi-urban (5.6%) students studying in the Classes VI to XII in RAS-2020 participated in the programme. The States and UTs like Assam, Dadra and Nagar Haveli, Daman and Diu, Goa, Ladakh, Madhya Pradesh, Mizoram and Uttarakhand have participated for the first time in the programme.



Kala Utsav 2020

Kala Utsav is a PAB approved programme of the department which was launched in 2015 by the Department of School Education and Literacy, Ministry of Education (erstwhile MHRD), Government of India, to promote arts in education, by nurturing and showcasing the artistic talent of school students in the country, recognising the importance of aesthetics and artistic experiences for secondary-level students, which plays a major role in creating awareness about India's rich cultural heritage and its vibrant diversity. Kala Utsav 2020 was sixth in the row after 2015 and this year, it was special as the whole process of competition and celebration was completed in the virtual mode. After inauguration of the National Level Kala Utsav on 10 January 2021, the 12-day long competitions in nine different categories started on 11 January 2021 and completed on



Students' performances during the Kala Utsav 2020



22 January 2021. The programme concluded on 28 January with an award function conducted by the Hon'ble Minister of Education, Government of India.

Special focus of this year was Indigenous Toys and Games, which was included as a new category to promote the use of indigenous toys and games in education. This exercise resulted in a good collection of toys and games from all over the country. Selected entries of nine art forms are put together in video form, which will help in promotion of arts and culture in education and fulfill the mandate of NEP 2020 of promoting Indian Arts and Culture through education.

Kala Utsav 2020 — List of Winners				
S. No.	Position	State	Name of Student (Full Name)	Name of the Art Form/Category
1.	1st	Kerala	Anand C.S.	Dance - Classical (Boy)
2.	2nd	Odisha	Chinmaya Kumar Das	Dance - Classical (Boy)
3.	3rd	Andhra Pradesh	K. Somnath Bharadwaj	Dance - Classical (Boy)
4.	1st	Karnataka	Sinchana Nempu	Dance - Classical (Girl)
5.	2nd	Maharashtra	Mhatre Arya Yugant	Dance - Classical (Girl)
6.	3rd	Manipur	Thounaojam Priyabina Devi	Dance - Classical (Girl)
7.	1st	Puducherry (UT)	S. Selvaragavan	Dance - Folk (Boy)
8.	2nd	Tripura	Faiswkang Jamatia	Dance - Folk (Boy)
9.	3rd	Karnataka	Rakeshraj Patil	Dance - Folk (Boy)
10.	1st	Puducherry (UT)	R. Swetha	Dance - Folk (Girl)
11.	2nd	Andhra Pradesh	K. Sujatha	Dance - Folk (Girl)
12.	3rd	Assam	Adhyapriya Dutta	Dance - Folk (Girl)
13.	1st	Bihar	Rishav Prakash	Vocal Music - Classical (Boy)
14.	2nd	Maharashtra	Vairagkar Atharva Onkar	Vocal Music - Classical (Boy)
15.	3rd	Kerala	Gopikrishnan S.	Vocal Music - Classical (Boy)
16.	1st	Tamil Nadu	Spoorthi Santhosh Rao	Vocal Music - Classical (Girl)
17.	2nd	Tripura	Namasree Singha	Vocal Music - Classical (Girl)
18.	3rd	Karnataka	Sumedha R.	Vocal Music - Classical (Girl)
19.	3rd	Maharashtra	Mungare Saniya Dhanaji	Vocal Music - Classical (Girl)
20.	1st	NVS	Rupesh Debbarma	Vocal Music - Traditional Folk (Boy)



21.	2nd	Delhi (UT)	Himadri	Vocal Music - Traditional Folk (Boy)
22.	3rd	Jammu and Kashmir (UT)	Sahil Hilal	Vocal Music - Traditional Folk (Boy)
23.	1st	Uttarakhand	Isha Dhami	Vocal Music - Traditional Folk (Girl)
24.	2nd	Haryana	Muskan	Vocal Music - Traditional Folk (Girl)
25.	3rd	Kerala	Amritha V.K.	Vocal Music - Traditional Folk (Girl)
26.	1st	Chhattisgarh	Vivek Dewangan	Instrumental Music - Classical (Boy)
27.	2nd	Delhi (UT)	Aditya Singh	Instrumental Music - Classical (Boy)
28.	3rd	Punjab	Chaitanya Sharma	Instrumental Music - Classical (Boy)
29.	1st	Tamil Nadu	A. Shreeya	Instrumental Music - Classical (Girl)
30.	2nd	Delhi (UT)	Siya Pota	Instrumental Music - Classical (Girl)
31.	3rd	Madhya Pradesh	Anushka Soni	Instrumental Music - Classical (Girl)
32.	1st	Jammu and Kashmir (UT)	Bilal Ahmad Malla	Instrumental Music - Traditional Folk (Boy)
33.	2nd	Delhi (UT)	Rishabh Malik	Instrumental Music - Traditional Folk (Boy)
34.	3rd	Ladakh (UT)	Tsering Kunsal	Instrumental Music - Traditional Folk (Boy)
35.	1st	Maharashtra	Shirke Bhakti Vijay Kumar	Instrumental Music - Traditional Folk (Girl)
36.	2nd	Jharkhand	Hemli Kumari	Instrumental Music - Traditional Folk (Girl)
37.	3rd	Assam	Nandini Kashyap	Instrumental Music - Traditional Folk (Girl)



38.	1st	Karnataka	Lokesha M.	Visual Arts - 2D (Boy)
39.	2nd	Puducherry (UT)	A. Avinash	Visual Arts - 2D (Boy)
40.	3rd	Tripura	Praloy Dey	Visual Arts - 2D (Boy)
41.	1st	Kerala	Akshaya Shameer	Visual Arts - 2D (Girl)
42.	2nd	Ladakh (UT)	Maqsuma Banoo	Visual Arts - 2D (Girl)
43.	3rd	Andaman and Nicobar Islands (UT)	Jasmine Toppo	Visual Arts - 2D (Girl)
44.	1st	NVS	D. Venkatrao	Visual Arts - 3D (Boy)
45.	2nd	Goa	Kaivalya Kamlesh Vasta	Visual Arts - 3D (Boy)
46.	3rd	Tamil Nadu	Vishwanath S.	Visual Arts - 3D (Boy)
47.	1st	Jammu and Kashmir (UT)	Pari Mughda Nischal	Visual Arts - 3D (Girl)
48.	2nd	Andaman and Nicobar Islands (UT)	Diya Rajbanshi	Visual Arts - 3D (Girl)
49.	3rd	Tamil Nadu	Kiruthika S.	Visual Arts - 3D (Girl)
50.	1st	Puducherry (UT)	V. Vignesh	Indigenous Toys and Games (Boy)
51.	2nd	Mizoram	Thangchungnunga	Indigenous Toys and Games (Boy)
52.	3rd	Manipur	Maransing Joy Jajo	Indigenous Toys and Games (Boy)
53.	1st	Kerala	Beneetta Varghese	Indigenous Toys and Games (Girl)
54.	2nd	Karnataka	Chandana A.	Indigenous Toys and Games (Girl)
55.	3rd	Sikkim	Grace Sundas	Indigenous Toys and Games (Girl)

Rollout Workshop on UDL based Accessible Textbooks and Supplementary Readers for All

The five roll out workshops were organised based on the principles of Universal Design of Learning (UDL) and Inclusion. The content covered includes NCERT’s exemplar accessible reading series *Barkhaa: A Reading Series for All*. Taking forward the learning from this exemplar, selected stories and poems (nine stories and poems from NCERT textbooks of Classes I to V) were adapted into accessible formats and include features such as, videos with illustrations, subtitles, and a teacher sharing the content of the story or poem using sign language. These prototypes were shared and participants were encouraged to



reflect on the process adopted and plan works in their States. In addition, an orientation programme was conducted on the recently developed guidelines for e-Content for Children with Disabilities.

A virtual meeting was held on 15 February 2021 as a follow up of the kickstart meeting on 29 January 2021. The discussions were focused on analysing the learning from the first regional workshop held online for the Eastern Region for fine tuning the training programme for the remaining regional workshops.

A workshop for the Eastern Region was organised for Andaman and Nicobar Islands, Bihar, Jharkhand, Odisha and West Bengal on 11 to 12 February 2021. The workshop for the North-Eastern Region was conducted for Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim and Tripura on 18 to 19 February 2021. The workshop for the Southern Region was attended by 50 participants from Andhra Pradesh, Karnataka, Kerala, Telangana and Tamil Nadu on 25 to 26 February 2021. The workshop for the Northern Region was organised for Chandigarh, Haryana, Himachal Pradesh, Jammu and Kashmir, National Capital Territory of Delhi, Punjab, Rajasthan, Uttar Pradesh and Uttarakhand on 8 to 9 March 2021. The workshop for the Western Region was organised for Chhattisgarh, Dadra and Nagar Haveli, Daman and Diu, Goa, Gujarat, Madhya Pradesh and Maharashtra on 15 to 16 March 2021. All the workshops were conducted virtually for the States/UTs.

PM eVidya: One Class, One Channel

The PM eVidya Programme was announced by the Hon'ble Finance Minister, Government of India (GoI) on 17 May 2020 as a part of *Atmanirbhar Bharat Abhiyaan*. Since then, the Ministry of Education (MoE) has undertaken several initiatives under this programme. PM eVidya is a step towards enduring the government's integrated missions for development like Digital India, Skill India and other related initiatives during the time of crisis and the challenges caused by COVID-19 pandemic.

PM eVidya initiative aims to facilitate technology-driven education with equity post-COVID-19. It offers multi-modal access to digital or online education for school and higher education level by integrating various other initiatives such as, DIKSHA (One Nation-One Digital Platform), SWAYAM, MOOCs, IIT-PAL, use of Community Radio and Podcast, development of e-Contents for DIVYANG in addition to 12 DTH Channels under One Class-One Channel scheme through SWAYAM PRABHA (Free to Air DTH Channels for Education).

Under this initiative, e-Contents (video and audio) have been produced that are being telecast and broadcast on 12 DTH TV channels and on radio, respectively. All these programmes are based on NCERT's curriculum covering Classes I–XII that are being telecast on the channels dedicated to respective classes. These 12 channels are also available on the Jio TV app. The broadcast of all these 12 channels started from 1 September 2020 before which the telecast of video programme used to happen on SWAYAM PRABHA Channel #31 *Kishore Manch* on 24×7 basis. All these curriculum based videos have a QR code embedded in them that can be scanned using DIKSHA app to reach DIKSHA platform (<https://diksha.gov.in/ncert/explore>). This coherence between TV and digital platforms aims to facilitate anytime anywhere access to the content. In addition to these curriculum-based videos, programmes including activities



like art, culture, heritage, yoga, physical education, general awareness and storytelling, etc., are also included in order to ensure an overall development of children. Till now, more than 4,500 video programmes have been recorded both in English and Hindi medium. These programmes have been recorded with the help of experts from NCERT, CBSE, KVS, NVS and NIOS. All the recorded programmes have been vetted by a set of experts of various subjects.

All the 12 DTH TV Channels have a daily fresh telecast of recorded programmes for two to three hours. (two hours for Classes I–X and three hours for Classes XI–XII) and are repeated 11 times and 7 times, respectively in 24 hours. Apart from these recorded programmes, live telecasts are also done every day catering to varied needs of learners. Daily one hours live telecast based on NCERT’s curriculum for Classes I–XII, one hour. Webinar based on Educational Technology and ICT tools, one hour SAHYOG for the mental well-being of the children is also being telecast. From April–September 2020, based on Alternative Academic Calendar (AAC), there were 307 (primary stage for 30–45 min), 294 (upper primary stage for 30–45 min), 270 (secondary stage for 30–45 min), 222 (sr. secondary stage for 30–45 min), 138 (ET/ICT webinar for one hour), 120 (SAHYOG for one hour) and 28 (NISHTHA-integrated learning) live sessions making a total of 1379 live programmes corresponding to 1046 hours were telecast.

After the launch of 12 channels under PM eVidya from 1 September 2020, the live interactive sessions were conducted as follows:

1. **Classes I to X live programmes:** 584 live interactive sessions of 30 minutes each on channels (1 to 10) covering about 292 hours of telecast.
2. **Classes XI and XII live programme:** 58 live interactive sessions of 60 minutes each on channels (11 and 12) covering about 58 hours of telecast.
3. **Webinar on ICT tools:** 150 sessions of 60 minutes each day covering 150 hours of telecast.
4. **SAHYOG:** 150 sessions of 30 minutes each day covering 75 hours of telecast.

As a support provided to the states, Assam (Classes VI, VII, VIII, IX and X (30 min) and for Class XII (one hour) and Uttar Pradesh (Classes IX and XII for one hour daily) are also transmitting their curriculum-based video programmes.

The curriculum-based audio programmes based on NCERT have been developed by CIET. The series of such programs is called *Dhwanishala*. These are mainly produced in teaching mode in an interesting manner so that the pupil can learn with joy. These programmes have been found to be effective during the COVID-19 pandemic due to closure of schools. Apart from the NCERT curriculum-based audio programmes, a variety of knowledge enrichment, infotainment and edutainment programmes in various audio media formats such as, documentary, feature, magazine, talk, interview, music and docudrama, etc., are also produced.

These programmes cover a wide spectrum and themes and the series is called *Umang*. The dissemination or broadcast of these programmes is being done on 88 Radio Stations (12 Gyan Vani FM Radio Stations at 105.6 MHz frequency, 76 Community Radio Stations with frequency ranging between 97.4 to 107.8 MHz) and Podcasts on iRadio and JioSaavn Mobile app. Till date, 522 pieces of curriculum-based radio programme (Classes I–VIII) are available on various platforms and many more are in the process of production.



e-Contents for DIVYANG and Children with Special Needs (CWSN) are available in various formats to sustain and support the spirit of inclusive education. These e-Contents include audio books, audio programmes, and textbooks in DAISY format and video lessons in Indian Sign Language (ISL). It has developed around 450 ISL video lessons and 34 books in DAISY format in collaboration with the Indian Sign Language Research and Training Centre (ISLRTC). In addition to this, it has also developed 384 audio books chapters that are based on UDL (<https://ciet.nic.in/index.php?&ln=en>).

A feedback mechanism has been developed to receive queries of learners from all across the country. For video programme, emails can be sent to the respective channel Ids (dth.class1@ciet.nic.in, dth.class2@ciet.nic.in, dth.class3@ciet.nic.in, dth.class4@ciet.nic.in, dth.class5@ciet.nic.in, dth.class6@ciet.nic.in, dth.class7@ciet.nic.in, dth.class8@ciet.nic.in, dth.class9@ciet.nic.in, dth.class10@ciet.nic.in, dth.class11@ciet.nic.in, dth.class12@ciet.nic.in) and also through an IVRS toll free no. 8800440559 which can be answered between 9am-5.30pm on all working days. For audio programmes, feedback is received on audiociet@gmail.com and on the official WhatsApp group of community radio stations.

Live plates of interactive sessions telecast on various channels for Classes I-XII

Watch Live Let's Fight COVID-19. Stay safe and learn through Alternative Academic Calendar
ciet.kishoremanoh@gmail.com

SWAYAM Prabha Channel #31
KISHORE MANCH by NCERT Weekly Schedule
11 May to 17 May 2020 - Primary

Date / Day	Time	Subject / Class	Topic	Expert
11/05/2020 Monday	10:30 am - 11:15 am	EVS / Class: IV	Tokri Banane wali Ladki	Dr. Prachi Kalra Gargi College, Delhi
	11:15 am - 12:00 noon	English / Class: I - II	Rhyming Words	Ms. Neeraj Kumari Core Academic Unit, DoE, Delhi
12/05/2020 Tuesday	10:30 am - 11:15 am	Hindi / Class: I - II	मैंने कुछ लिखा है - II	Prof. Usha Sharma DEE, NCERT
	11:15 am - 12:00 noon	Maths / Class: II	Writing of 2-digit numbers- Place Value	Dr. Sunil Bajaj SCERT, Gurgaon, Haryana
13/05/2020 Wednesday	10:30 am - 11:15 am	English / Class: IV	Paragraph Writing	Ms. Meena Sherawat DIET, SCERT, Delhi
	11:15 am - 12:00 noon	EVS / Class: III	Sandeshe Aate Hain	Ms. Baljeet Kaur SOMC, Amar Colony
14/05/2020 Thursday	10:30 am - 11:15 am	Hindi / Class: V	फसलों के त्योहार	Dr. Anuradha Sardar Patel Vidyalaya, Delhi
	11:15 am - 12:00 noon	Maths / Class: III	Writing of 3-digit Numbers	Prof. Dharam Prakash Retd. Prof., NCERT
15/05/2020 Friday	10:30 am - 11:15 am	Hindi / Class: IV	भाषा -सृजन (कहानी)	Ms. Surabhi Chawla Great Mission Teacher's Training Institute
	11:15 am - 12:00 noon	EVS / Class: V	Jadon Ka Jadoo	Dr. Rashmi Sharma RIE-NCERT, Bhopal
16/05/2020 Saturday	10:30 am - 11:15 am	Psychology	Calm your fear to promote well-being	Ms. Deepmala DEPPE, NCERT
	11:15 am - 12:00 noon	Visual Arts	Block printing with different objects and materials. Create patterns with printing on paper sheets.	Prof. Pawan Sudhir DEAA, NCERT
17/05/2020 Sunday	10:30 am - 11:15 am	Health & Physical Education	Minor Games for Primary Children	Prof. A. K. Dutta LNPE, Gwalior
	11:15 am - 12:00 noon	ICT Initiatives	Cyber Safety & Wellness	Ms. Nisha Dua Cyber Peace Foundation

Weekly Schedule

DD Free Dish Channel #128
Dish TV Channel 6950
Sundirect #793 1800111265
1800112199 iTV NCERT OFFICIAL Tattasky Channel #756
Airtel Channel #440
Videocon channel #477



Watch Live
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ciet.kishoremanch@gmail.com

SWAYAM Prabha Channel #31
KISHORE MANCH by NCERT
 Weekly Schedule
17 August to 23 August 2020
Mental Well-Being of Children
SAHYOG
Time
05:00 pm to 05:30 pm

Date / Day	Topic	Panelists	
		Counsellor	Faculty
17/08/2020 Monday	Understanding Positive Mental Health	Ms. Shivani Laishram Practising Counsellor	Dr. Prachi Ghildyal NE-RIE, NCERT
18/08/2020 Tuesday	Building Resilience	Ms Sonaleeca Das Practising Counsellor	Prof Flourette G Dkhar NE-RIE, NCERT
19/08/2020 Wednesday	Taking Care of Mental Health of Children during Pandemic Situation	Dr. Lopamudra Saha Practising Counsellor	Prof. Subhas Chandra Roy NE-RIE, NCERT
20/08/2020 Thursday	Moving Towards Social Wellness	Ms. Namita Goswami Practising Counsellor	Dr. Basansy Khariukhi NE-RIE, NCERT
21/08/2020 Friday	Anger Management for Emotional well being in today's context	Ms. Indira Buragohain Practising Counsellor	Prof. Balaiada R Dkhar NE-RIE, NCERT
22/08/2020 Saturday	Developing Positive Attitude in life	Ms. Debamitra Ray Practising Counsellor	Dr Sarajubala Devi NE-RIE, NCERT
23/08/2020 Sunday	Adolescents During Pandemic	Ms. Tahera Hoque Mozunder Practising Counsellor	Mr. Umesh Kumar Sharma NE-RIE, NCERT

Weekly Schedule

 DD Free Dish Channel #128
 Dish TV Channel #950
 Sundirect #793
 1800111265
 1800112199
 Jio TV
 NCERT OFFICIAL
 Tata Sky Channel #756
 Airtel Channel #440
 Videocon channel #477

Watch Live Session
Class - VII
Channel #07

Let us fight #COVID-19
Perimeter and Area - II
Subject: Mathematics
04 March 2021
(2:30 pm to 3:00 pm)
Live interaction with:
Ms. Neeta Batra
 Assistant Professor, SCERT, Delhi

DD Free Dish
 Dish TV Channel #948
 1800111265
 1800112199
 Jio TV
 NCERT OFFICIAL



MANODARPAN
Initiative of Ministry of Education
for
Psychosocial Support and Mental well-being of Students
National Telehelpline- 8448440632

SAHYOG
Watch LIVE Session

Class - I to XII

Let us fight #COVID-19
**How to overcome
Examination Anxiety**

04 March 2021
(05:00 pm to 05:30 pm)

Live interaction with:
Dr. Seeja K. R.
Practising Counsellor
Prof. Anil Kumar K.
RIE - Mysuru, NCERT

DD Free Dish
Dish TV Channel

180011265
1800112199

Jio TV

NCERT OFFICIAL

DIKSHA, ePathshala and NROER

One of the primary mandates of CIET, NCERT has been to create e-Contents including energised/QR coded textbooks and interactive e-resources such as audio-video contents, interactive contents, images, interactive quizzes and disseminate them through online and offline solutions. CIET also provides technical support to other constituent units of NCERT in their digitisation/automation process and is frequently involved in the development of portals, mobile apps, technical capacity building, and catering to all the online/digital education related tasks/queries and requirements of the ministry as well.

The CIET at NCERT as of today has 16 websites and 10 mobile apps. The prominent digital platforms include DIKSHA, ePathshala, NROER and the main website of NCERT. These websites are regularly being updated with newer contents, while new features are also being added as per the need. In order to make sites more user friendly and interactive, periodic updation of these websites is required and this is meticulously planned. These portals are also being regularly monitored from the cyber security point of view and regular updates are done as per the suggestions of NIC. The uploading of e-Content involves their vetting as well as creation of metadata. The eBooks are available in pdf, ePubs and Flipbook formats.

Another major activity is collaboration with various other organisations. Such proposals include collaboration/sharing of technologies, dissemination of apps through third party stores and platforms, and proposals for MoU to share content with the NCERT. CIET is required to study such proposals,



evaluate technical scope, validate w.r.t. NCERT frameworks and policies and accordingly collaborate with the organisations.

Another major task involves carrying out different national initiatives on behalf of the Ministry of Education. Some of the recent examples include Essay competition, Quizzes, Communication material on NEP, photography contests, and various other such events under NEP, *Atmanirbhar Bharat*, Celebration of 150th Birth Anniversary of Gandhiji, Yoga Olympiad, *Kala Utsav*, etc.

The web development and testing activities are mostly done in-house, involving open source technologies. The websites are largely hosted at NIC. Given below is the station of progress of major activities undertaken under DIKSHA, NROER and ePathshala.

DIKSHA

DIKSHA (Digital Infrastructure for Knowledge Sharing) is a national platform for school education, an initiative of National Council for Educational Research and Training (NCERT), under the aegis of the Ministry of Education (MoE), GoI. Launched in 2017, DIKSHA has been adopted by almost all the States/UTs, including CBSE and other Autonomous Educational bodies/Boards. DIKSHA can be accessed by learners and teachers across the country and currently supports uploading of content in 33 Indian languages. Each State/UT leverages the DIKSHA platform in its own way, as it has the freedom and choice to use the varied capabilities and solutions of the platform to design and run programmes for their teachers and learners. DIKSHA policies and tools make it possible for the education ecosystem (educationists, experts, organisations, institutions — government, autonomous institutions, non-Government and private organisations) to participate, contribute and leverage a common platform to achieve learning goals at scale for the country. Under the PM eVidya initiative of the GoI, which was declared as a part of the *Atmanirbhar Abhiyan*, DIKSHA has been declared as ‘One Nation, One Digital Platform’.

Keeping in mind the constraint of availability of Internet powered devices across the households, DIKSHA has been leveraged to enable coherent access. Under this, the broadcast contents through the 12 PM eVidya Television channels are being made available on DIKSHA, and linked through QR codes. Thus, the contents broadcast on TV channels can be accessed anytime, anywhere, along with additional digital resources, thereby ensuring inclusive, equitable access to education for all, as envisaged under SDG Goal 4 of the UN.

DIKSHA is capable of providing specialised learning services at scale. The core building blocks have enabled some of the successful use-cases of DIKSHA, such as energised textbooks, online courses, content authoring, content sourcing, interactive quizzes, questions banks, chatbot, analytics and dashboard. In the times of COVID-19 pandemic, the platform has experienced an unprecedented rise in access by learners and teachers across the country. There have been more than 315+ crore learning sessions, 3,755+ crore learning minutes, 5.5+ crore page hits. The DIKSHA portal currently houses 3888 energised textbooks with QR codes, including 357 NCERT textbooks. In total there are 1,73,223 pieces of e-Content live on DIKSHA. There are 8,469 e-Contents in the form of videos and 1,100 audio contents available on DIKSHA till date. The e-Contents are available in 33 languages.



NIOS has also been on board to DIKSHA as a separate tenant (<https://diksha.gov.in/nios/>) under which 1,180 contents (videos, pdfs, e-textbooks) have been uploaded for Secondary level (equivalent to X grade). NCERT has recently entered into an MoU with ISLRTC under which sign language videos are being developed jointly. Once developed, these videos will be uploaded on DIKSHA.

Under the PM eVidya programme through the *Atmanirbhar Bharat* scheme, NCERT has been continuing the 12 DTH-TV channels since 1 September 2020. Six other States (Assam, Haryana, Gujarat, Odisha, Karnataka and UP), are also leveraging DIKSHA for TV coherence.

DIKSHA State coordinators' meetings are being held on a monthly basis. Till now, six such meetings were held with DIKSHA state coordinators in which many agenda items were discussed such, as e-Content development in multiple languages including machine transcription and translation, development of energised textbooks by all States/UTs and autonomous bodies, development and dissemination of e-Content for all learners including CWSN, etc.

Under the National Foundational Literacy and Numeracy Mission, DIKSHA is also planned to be used for dissemination of byte size videos, test items, etc. DIKSHA also houses learning outcomes based content for primary classes in the form of videos, worksheets and infographics. Many online quizzes were also played on DIKSHA by school students, e.g. National Constitution Quiz with Ministry of Law and Justice, National Yoga Quiz, Know your Constitution quiz, Discover Gandhi Quiz, etc. Total Page hits on DIKSHA during the pandemic period till January 2021 is more than 1,884 crores. Three e-Contents development training programmes were organised for 36 states and UTs covering 750 State Resource Group members trained to facilitate the development of quality e-Contents.

ePathshala

The Digital India Campaign (2015) promotes extensive integration of ICT in the teaching learning process. The National Education Policy (NEP) 2020 further highlights the need to use and integrate technology to improve multiple aspects of education. The NEP 2020 rightly emphasises on the need to develop a rich variety of educational software, for students and teachers at all levels, in all major Indian languages and accessible to a wide range of users including students in remote areas and *Divyang* students. The policy envisages the tremendous role for CIET to play in this ambitious plan of leveraging modern technologies for holistic progress in education. The portal has 2,719 audios, 2,516 videos, 696 e-books (e-pubs) and 504 flip books. It has 12,50,28,016 visitors; 6,12,81,003 total YouTube views, 43,91,563 app downloads and rating of 3 out of 5 on Google Play store and 4.3 out of 5 on Windows Store.

ePathshala contains 372 digital textbooks in ePub format, 131 textbooks in (Hindi medium and Sanskrit), 115 textbooks in English medium and 126 textbooks in Urdu medium, to make these textbooks accessible for differently abled NCERT has converted 115 textbooks (Hindi and Sanskrit medium), 101 textbooks in English medium and all the 126 textbooks in Urdu medium in Unicode fonts to enable text-to-speech and online search, etc. The process of making the remaining 30 textbooks accessible is in progress. NCERT has embedded QR codes linked with eResources with all the textbooks. As the next



step, NCERT is also planning to have image description with all the digital textbooks to make them more accessible.

ePathshala mobile app has been revised by redesigning the app interface to showcase books from States and UTs; language interface was enabled to support three languages, i.e., Hindi, Urdu and English; Push notifications was enabled to send messages to users; User profile was integrated, creating and showcasing analytics.

National Repository of Open Educational Resources (NROER)

The National Repository of Open Educational Resources (NROER) (<http://nroer.gov.in/welcome>) was developed as a joint initiative of the Ministry of Education, Government of India, and NCERT with the following objectives to make digital resources available for teachers and students as free and open source material, to enable the participation of the community in the development and sharing of digital resources and to facilitate the adoption and creation of digital resources in different Indian languages.

The collections include resources from a variety of institutions and in many languages. The portal has been enabled to offer eCourses, events, interest groups and personal spaces for partners, schools and all registrants. The platform also enables partner institutions to showcase their collection and offer continuous support to teachers and schools. The NROER portal is presently available in English and Hindi. It hosts thematically organised content in all the subjects for Classes I to XII. Till date, NROER houses a total of 19,496 contents including 700 collections, 5934 documents, 1453 interactive, 2956 audios, 2582 images and 6571 videos are uploaded. These contents are slowly being curated and uploaded on DIKSHA.

National ICT Awards

The Information and Communication Technology [ICT] intervention in Schools under *Samagra Shiksha* has a component to motivate school teachers, educators and States in innovative use of ICT in school and teacher education leading to improved quality in all the spheres of school and teacher education. The purpose is to recognise teachers, educators and States/UTs through the National ICT Award for quality education. National Education Policy 2020 under the section “Principles of this Policy” emphasises the extensive use of technology in teaching and learning, removing language barriers, increasing access for *Divyang* students, and educational planning and management. The National ICT Award for teachers has now been envisaged to extend the organisation of Award ceremonies also for Teacher Educators and States/UTs for their best practices on DIKSHA and other ICT initiatives. A dedicated portal has been developed for the year 2018 and 2019 and 205 nominations had been received from 35 States/UTs/Autonomous Organisations. The Jury meeting for the years 2018 and 2019 has been conducted from 5 to 11 February 2021. The Award ceremony for the selected candidates will follow as per the date finalised by DSE&L, MoE-Gol.

Organisation of Festival, ICT Mela, Contests of Digital Contents and Coordination with States and UTs

All India Children’s Educational Audio Video Festival (AICEAVF) and ICT *Mela* is an event in which there is an amalgamation of development and dissemination



of educational e-Contents as well as awareness about the new innovations in technology in education. 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 (CIET), NCERT, New Delhi, every year. It is unique in several ways. It is perhaps the only festival which celebrates educational media of all kinds, such as audio, video and new media. *ICT Mela* is held concurrently to showcase the innovations in the use of ICT in education.

There are a total of 462 entries received under various categories. This year there are five categories: audio, video, byte size videos on learning outcomes, new media and ICT and digital games. These have been further categorised under the four stages of schooling, i.e., Foundational level, Preparatory level, Middle and Secondary Level; as per the National Education Policy (NEP) 2020. Out of the total 462 entries, there are 65 entries for audio (14-Foundational, 17-Preparatory, 16-Middle and 18-Secondary), 252 for video (60-Foundational, 57-Preparatory, 81-Middle and 54-Secondary), 55 for byte size videos on learning outcomes (12-Foundational, 11-Preparatory, 23-Middle and 9-Secondary), 67 for new media and ICT (11-Foundational, 15-Preparatory, 22-Middle and 19-Secondary) and 23 entries for digital games (13-Foundational, 2-Preparatory, 7-Middle and 1-Secondary). The entries will be assessed by a jury of experts and will be finalised after the jury meeting for the final awards ceremony.

NISHTHA Online for the Elementary Level

As per the recommendations of NEP 2020, each teacher is expected to participate in at least 50 hours of Continuing Professional Development (CPD) opportunities every year for their own professional development, driven by their own interests. CPD opportunities will, in particular, systematically cover the latest pedagogies regarding foundational literacy and numeracy, formative and adaptive assessment of learning outcomes, competency-based learning, and related pedagogies, such as experiential learning, arts-integrated, sports-integrated, and storytelling-based approaches, etc.

National Initiative for School Heads’ and Teachers’ Holistic Advancement (NISHTHA), under *Samagra Shiksha*, is a flagship programme of MoE which was launched on 21 August 2019 by the Hon’ble Minister of Education, Shri Ramesh Pokhriyal Nishank. This training covers all the recommended areas of NEP 2020 and aims at the holistic development of teachers. Under NISHTHA face-to-face training, 23,137 SRGs and 17,74,728 teachers and head teachers working in state governed schools were covered from 33 States/UTs in a span of eight months. Time bound scaling and the reach of such training is still a challenge in a country like India, where there is a huge diversity due to language, geographical locations, culture, socio-economic conditions, etc.

NCERT continued the SRG training for Andhra Pradesh in blended mode by delivering course content and activities through a Learning Management System (www.nishtha.ncert.nic.in), live interaction through DTH channel and communication through Telegram group. NCERT planned to continue NISHTHA— integrated teacher training also through DIKSHA platform and reach out to 42 lakh elementary school teachers. DIKSHA is an initiative of the Ministry of Education, Government of India, and is being managed by the NCERT. The online platform of DIKSHA offers engaging learning material for both teachers and students, and is available in the form of Portal and Mobile App.



SWAYAM PRABHA

The Ministry of Education, Government of India has developed a learning plan for the utilisation of satellite communication technologies for the transmission of educational e-Contents through 32 National Channels, i.e., SWAYAM PRABHA DTH-TV network. CIET-NCERT is the national coordinator for one DTH TV channel, i.e., *Kishore Manch* (#31) and has started feeding a 24×7 slot. Every day a six hour fresh slot was provided by CIET, which gets repeated three times in 24 hours to offer learning opportunities for the stakeholders. CIET programmes are also telecast through National Channel (DD-I). These programmes are available through a sales mechanism in CD/DVD formats.

MOOCs on SWAYAM

Massive Open Online Courses (MOOCs) platform popularly known as SWAYAM, i.e. Study Webs of Active learning for Young Aspiring Minds (<https://swayam.gov.in/>) along with 32 SWAYAM PRABHA DTH Channels and National Academic Depository was launched by the former Hon'ble President of India, Sh. Pranab Mukherji on 9 July 2017 at Vigyan Bhawan, New Delhi. The portal offers various online courses for school education and higher education. NCERT has started the development of course modules for MOOCs for the school education system in 12 subject areas (Accountancy, Business Studies, Biology, Chemistry, Economics, History, Geography, Mathematics, Physics, Political Science, Psychology and Sociology) for Classes IX–XII. CIET-NCERT has also been assigned the task of developing e-resources for the Master of Education (M.Ed.) course jointly with Allahabad University; this project is funded by UGC. Around 30 MOOCs for 11 subjects of Classes XI and XII and three generic on Food and Nutrition and Urdu teaching are developed and being conducted through SWAYAM. Around 48 thousand learners are enrolled in the courses till 31 March 2021.

Innovative Model of Vocational Education implemented by PSSCIVE in 10 Schools

Pandit Sunderlal Sharma Central Institute of Vocational Education (PSSCIVE) is implementing the PAB (*Samagra Shiksha*) approved project of Innovative Model of Vocational Education in 10 Schools since 2018–19. Currently, the project is being implemented in nine schools, which include four Demonstration Multipurpose Schools (DMS) located at Ajmer, Bhopal, Bhubaneswar and Mysuru, and five other schools identified by the State Education Department of Karnataka, Madhya Pradesh, Meghalaya, Odisha and Rajasthan. Vocational subjects are being offered in seven sectors, namely, Agriculture, Automotive, Beauty and Wellness, Electronics, Information Technology-IT enabled Services, Retail, and Tourism and Hospitality.

In order to create awareness about vocational education as a viable career option, students were given guidance and counselling by professional experts on aspects related to vocational courses from Classes IX to XII and their future scope in terms of employment. Practical training, hands-on demonstration, use of technology, and peer group interactions were undertaken by the schools with the help of external experts and by organising industry visits. Experts in the field were called for interactions with students periodically. During the COVID-19 pandemic, online classes and video lectures were arranged by the schools so that students remain in contact with the teachers and continue their



studies. Visits were organised to Science Centres to learn the basic principles of science through the science equipment. Extra lecture sessions, field visits, exhibitions, and inter-school quiz competitions were organised with proper precautions and protocol of COVID-19. WhatsApp groups were created to share recorded videos and notes along with the previous year question papers, slide presentations and videos with students. The progress of students was monitored through online sessions during the lockdown period and offline sessions before or after the lockdown period. For the children who did not attend the classes, parents-teachers meetings were organised. Student's portfolio was maintained by the students under the guidance of the Vocational Teachers.

In 2019–20, every school organised field visits and On-the-Job-Training (OJT) for the students, but in 2020–21, due to lockdown most of the schools were unable to organise any sort of field visits for vocational exposure at the workplace. Almost all the schools achieved 100 per cent pass percentage during 2019–2020 and 2020–21 in vocational subjects offered in nine schools under the project. Schools are making necessary preparation for introducing pre-vocational education programme in Classes VI to VIII.

Bhasha Sangam Programme–2021

The basic objectives of *Bhasha Sangam* are to introduce our students with all the 22 Indian languages mentioned in the 8th Schedule of Indian Constitution, to bring students close to the unique cultural hues and diversity of our country through these languages and to increase honour and respect for languages. RIE, Bhubaneswar was selected for Bengali and Odia language. One hundred sentences each in both the languages were audio recorded for *Bhasha Sangam* programme.





9. Visitors to the NCERT

The National Council of Educational Research and Training is a hub of educational experiences in the area of school and teacher education. Educationists, educational administrators, faculty members, researchers, teacher-educators, students, etc., from national and international institutions visited the Council to gain experiences in the areas of curriculum development, preparation of syllabi, textbooks and teaching-learning materials, production of audio-video material 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 a 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 International Relations Division co-ordinates the visit of foreign delegates and Public Relations Unit of NCERT coordinates the visit of persons from national organisations and institutions. Keeping in view the importance of international cooperation in the field of school education, the Council hosts foreign delegations, facilitates their interaction with different Departments and Constituent Units pertaining to the 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 institutions like the Florida Center for Reading Research at Florida State University (FSU), USA, and College of Education, University of St. Francis (USF), USA; Academy of Korean Studies (AKS), Republic of Korea; Mauritius Institute of Education (MIE), Mauritius and Curtin University.

Due to the COVID-19 pandemic situation, the meetings with the foreign countries and institutions were organised via the virtual mode and no foreign visits were made by the NCERT faculty during the year.

Visits by Delegations and Experts from Various Countries

Educational Collaboration between NCERT and the USA

Pursuant to visits, a series of discussions and exchange of drafts, an approved (MoU) was signed on 2 February 2021 through virtual mode between NCERT, India, and the Florida Center for Reading Research at Florida State University (FSU), USA and College of Education, University of St. Francis (USF), USA. The virtual signing ceremony meeting chaired by Sridhar Srivastava, *Director (In charge)*, NCERT took place in the presence of thirteen members inclusive of eight NCERT faculty members, five representatives from the University of St.



Virtual signing of MoU among NCERT, India, and Florida Center for Reading Research at Florida State University (FSU), USA, and College of Education, University of St. Francis (USF), USA

Francis and Florida State University, USA and two representatives from the Florida Center for Reading Research at Florida State University, USA.

The MoU aims to promote collaboration in reading interventions; establish a National Centre for Reading Intervention and Research in India to develop, train and promote reading research and dissemination of evidence-based best practices in regard to reading; undertake research in evidence-based reading interventions; promote development and use of psychometrically validated assessment tools and techniques for screening and early identification of poor reading, diagnosis of literacy skills, monitoring progress in literacy development; and evaluating student behaviour, social and emotional learning, adverse childhood experiences amongst student population in Indian schools; and to explore possibilities for validation and adaptation of resources from the Florida Centre for Reading Research (FCRR) in the Indian school education context.

Bilateral Cooperation: NCERT and Iran Culture House

The Iran Culture House, New Delhi, approached the NCERT to initiate a bilateral cooperation in the areas of mutual interest in education. A meeting chaired by the Director, NCERT, was held on 15 December 2020 at NIE, New Delhi, for discussing the need to build on the historic and civilisational ties between the two countries. The minutes of the meeting was shared with the Organisation of Educational Research and Planning, Ministry of Education



Sridhar Srivastava, Director (In charge), NCERT, interacting with an Iranian delegation

of Iran, Iran Culture House, New Delhi. A virtual meeting was held on 22 February 2021 between NCERT and the Organisation of Educational Research and Planning, Ministry of Education of Iran, and Iran Culture House, New Delhi. This meeting was chaired by the Director (In charge), NCERT, and was attended by twelve members from NIE and six members from Iranian delegation including four members from Ministry of Education, Iran; one member from Allama Tabtabi University, Teheran; and one member from Saddi Foundation of Iran and two members from Iran Cultural House, New Delhi. An interpreter from Jamia Millia Islamia helped in translations. Discussions and work plans are in progress on the areas delineated during the meeting.

Activities undertaken for signed MoUs: The Republic of Korea, Australia and Mauritius

Joint Working Committee Meeting of NCERT and Academy of Korean Studies

As a part of the MoU between NCERT and the Academy of Korean Studies, the 4th Joint Working Committee meeting of Academy of Korean Studies (AKS) and NCERT was held on 5 November 2020 in virtual mode. The objective of the meeting was to work out the details of the activities to be undertaken



Participants at the fourth Joint Working Committee Meeting that took place between NCERT, India, and the Academy of Korean Studies (AKS), South Korea, through the virtual mode



Fourth Joint Working Committee Meeting of NCERT and the Academy of Korean Studies



under four areas of cooperation— (i) curriculum and textbook development, (ii) ICT and educational technology, (iii) vocational education, and (iv) education of groups with special needs. The meeting was attended by 24 core members and eight observers from NCERT and their Korean counterparts. Lee Sejin, *First Secretary*, Political Affairs Department attended the meeting as a representative of the Republic of Korea (RoK) Embassy in New Delhi. A video message from the H.E. Shin Bongkil, *Ambassador*, RoK, was also played. A comprehensive report on the deliberations and decisions taken during the meeting prepared by IRD was shared with all the concerned stakeholders.

Activities undertaken for Signed MoUs with Mauritius

As a part of the MoU activities with the Mauritius Institute of Education (MIE), Mauritius, CIET has created a portal with resources comprising videos, documents and assessments. It has a wide viewership. A mobile app is under development. A four-day training programme on ‘Use of e-Content’ was also organised for the functionaries from Mauritius at CIET. Discussions were initiated with MIE for planning online training programmes for the MIE faculty. A need was felt to build the capacity of faculty for meeting the needs of children with special needs, on the recently developed e-Content guidelines for children with disabilities. The sharing of experience of the development of UDL based teaching-learning material for inclusive classrooms is also planned.

Activities undertaken for Signed MoUs with Australia

As a part of the ongoing MoU activities between NCERT and Curtin University, *Dean*, International Faculty of Humanities, School of Education, Curtin University has proposed teaching internship to their students for a period of five weeks at RIE, Bhopal. Planning for the first batch of students likely to visit in mid-January 2022 is underway. The visits are planned annually for three consecutive years.

Follow-up of Draft MoU: NCERT and Taiwan, Sri Lanka, Bhutan and Nepal

Follow-up communications for finalisation of the draft MoUs, post discussions and mutual visits are underway between NCERT and the Graduate Institute of Science Education (GISE), National Taiwan Normal University, Taiwan, the Royal Education Council in Bhutan; the National Institute of Education in Sri Lanka and the Educational Review Office (ERO), the Ministry of Education, the Science and Technology in Nepal.

Visit of the Ambassador of the Republic of Korea

Shin Bong Kil, *Ambassador*, Republic of Korea (RoK) to India, visited PSS Central Institute of Vocational Education (PSSCIVE) on 17 December 2020. He was accompanied by Sejin Lee, *First Secretary* and Kim Anna, *Researcher*, Embassy of the RoK of India. The main purpose of the visit was to review the status of the proposed Technical Cooperation between Korea International Cooperation Agency (KOICA) and NCERT for ‘Vocational Education and Training in Mechatronics, and to interact with the faculty of Regional Institute of Education (RIE), Demonstration Multipurpose School (DMS), and PSSCIVE, Bhopal. The Ambassador visited the vocational lab of Mechatronics established at DMS under the Memorandum of Understanding between the Academy of Korean Studies (AKS) and NCERT. Discussions were also held regarding the development of curricula for a Certificate Course in Mechatronics



by the PSSCIVE and experts from the Korea Research Institute for Vocational Education and Training (KRIVET) and the visit of the faculty of PSSCIVE, RIE and DMS to Meister Schools of Republic of Korea for understanding the various aspects of implementation of the project on Mechatronics.

Visit of DIET and GCERT Officials and Delegates from Gujarat State

A team from Gujarat State consisting of Director, GCERT, State Officers, Educationists and Experts from education field visited the PSSCIVE on 5–6 March 2021 to get exposure considering the recommendations of National Education Policy 2020 regarding Vocational Education at State Level and learn about its implementation in the state. Also, a team from GCERT of Gujarat State visited the institute on 18–19 March 2021.





APPENDICES

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NCERT's Constituents and Faculty

Publications and Presentations by NCERT Faculty

DEPARTMENT OF EDUCATION IN SCIENCE AND MATHEMATICS (DESM)

Research Papers and Articles

- GUPTA, GAGAN. 2015. International year of light and light-based technologies. *School Science*. Vol. 53, No.4. pp. 5–7.
- GARG, RACHNA. 2015. Sources of light: What they can reveal. *School Science*. Vol. 53, No.4. pp. 30–34.
- GUPTA, GAGAN. 2015. 42nd Jawaharlal Nehru National Science, Mathematics and Environment Exhibition (JNNSMEE) for children. *School Science*. Vol. 53, No.4. pp.52–54.
- . 2015. Gamma-Ray Laser: Some Notes. *School Science*. Vol. 53, No. 4. pp. 35–40.

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)

Research Papers and Articles

- BISWAS, R.K. 2021. An evaluative study on ICT knowledge of students in schools of SC and ST areas of Rajasthan. *International Research Journal of Commerce, Arts and Science*. Vol. 12, No. 3. pp. 29–38.
- . 2020. Participation in teaching-learning activities and investigation problems of students during a three months field-work. *International Research Journal of Management Sociology and Humanity*. Vol. 11, No. 6. pp. 345–352.
- . 2020. An evaluative study on ICT knowledge of teachers in schools of SC and ST areas of Rajasthan. *International Research Journal of Management Sociology and Humanity*. Vol. 11, No. 9. pp. 408–418.
- SINGH, V.K. 2020. Vocational avenues for adults with intellectual disabilities: An exploratory study. *Gitarattan Journal of Education*. Vol. 3, No.2. pp. 35–50.
- . 2020. Open schooling for children with disabilities. *Gyan Bhav-Annual and Bi-lingual International Journal on Teacher Education*. Vol. 9, No. 12. pp. 8–23.

Book Chapters

- SINGH, V.K. 2020. A child with multiple sclerosis in school: Case study. In Vanitha, C. (Ed.), *Recent trends in inclusive education*. (pp.87–98). New Delhi: Today and Tomorrow's Printers and Publishers.

Paper Presentations

- SINGH, V.K. 2020. Implications of COVID-19: Opportunities and challenges in education of children from perspectives of children, teachers, parents and community. Paper presented in the national online webinar on *Child*

Education: Opportunities and Challenges during and Post COVID-19. National Institute of Public Cooperation and Child Development, Lucknow, 12 June.

- . 2020. Scope of inter-organizational convergence of academic activities. Paper presented in the national webinar on *Convergence in Development Programmes for Women and Children with Different Institutions/Organisations/Universities/Departments*. National Institute of Public Cooperation and Child Development, Mohali, 29 July.
- . 2020. COVID-19: Impact and challenges in education of children with disabilities. Paper presented in the national webinar on *Social and Emotional Well-being of Children during and after COVID-19 Lockdown Situation*. National Institute of Public Cooperation and Child Development, Mohali, 27 August.
- . 2020. A child with multiple sclerosis in school: Case study. Paper presented in the national webinar on *Recent Trends in Inclusive Education*. Central University of Kerala, 2–3 November.

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION (DEPFE)

Research Papers and Articles

- MISHRA, P.K., AND V. GAIROLA. 2020. COVID-19 turned upside down: A psychological perspective. *Pedagogy of Learning*. Vol. 6, No. 4. pp. 1–7.
- CHAKRABORTY, S. 2020. Perception about engagement of students enrolled through lateral entry: Voices of teachers and students. *Pedagogy of Learning*. Vol. 6, No. 4. pp. 19–27.

DEPARTMENT OF TEACHER EDUCATION (DTE)

Research Papers and Articles

- SINHA S. (In Press). Online science teaching and learning among children in COVID-19 Pandemic. *School Science*. Vol. 59, pp. 1–2.
- PATEL, M.S. 2021. Teacher education for sustainable development in India: Content analysis of syllabus at elementary level of Madhya Pradesh and Rajasthan. *International Journal of Advanced Education and Research*. Vol. 6, No. 1. pp. 69–79.
- . 2021. Enriching teacher education institutions for promoting sustainable development: A case study. *International Journal of Educational Research and Studies*. Vol. 3, No. 1. pp. 23–31.
- VIJAYAN, K., AND JASEENA, FATHIMA P.N.M. 2020. Reflections of student-teachers on school internship of 2 year B.Ed. programme. *Journal of Indian Education*. Vol. 49, No. 1. pp. 145–159,
- PATIDAR, JITENDRA KUMAR. 2020. *Shikshak shiksha dwara sandharniya vikas ki pahal*. *Bhartiya Adhunik Shiksha*. Vol. 40, No. 4. pp. 26–36

Book Chapters

- SINHA, S. 2021. COVID-19 pandemic: A catalyst to eVolve new teaching strategies. In Mishra, S., and Sarkar, S. (Eds.), *New trends in education*. (pp. 1–11). New Delhi: ABS Books.

Paper Presentations

- BHARDWAJ, B.P. 2020. Panelist in the national symposium on *Roadmap for Implementation of NEP 2020 (National Educational Policy): Rhetoric to Practice*, Chandigarh College of Education, Mohali, Punjab, 3 October.
- . 2020. Invited talk in the webinar on *National Educational Policy 2020*, Jain Vishva Bharati Institute, Ladnun, Rajasthan, 16 October.
- SINHA, S. 2020. Performance standard for teachers and teacher educators. Paper presented in the national webinar on *Teacher Education: Concerns, Challenges and Innovations*, DTE, NCERT, New Delhi, 1–4 July.
- PATIDAR, JITENDRA KUMAR. 2020. Emerging needs of networking among and between teacher education institutions. Paper presented in the national webinar on *Teacher Education: Concerns, Challenges and Innovations*, DTE, NCERT, New Delhi, 1–4 July.
- VIJAYAN, K. 2021. Integration of STEAM education in school curriculum: Challenges and possibilities. Paper presented in the national conference on *Integration of STEAM in school education*, RIE, Bhopal, 26–28 February.
- SINHA, S. 2020. Key note speaker in the national webinar on *Teacher Education: Issues and Challenges in Present Era*, Central Academy Teachers Training College, Ajmer, 4 July.
- . 2020. Implications of NEP 2020 for school education. Panelist in the national webinar on *Implication of NEP 2020*, School of Education, IGNOU, New Delhi, 10–11 September.
- . 2020. School leadership for school improvement and student learning. Chaired the session in the national webinar on *Perspectives and Practices on School Leadership*, NIEPA, New Delhi, 23–24 March.
- VIJAYAN, K. 2020. Teacher Education- NEP 2020. Invited speaker in the national webinar on *Teacher Education in India: A Panoramic Outlook on NEP 2020*, CSI College of Education, Parassala, Thiruvananthapuram, 10–11 August.
- . 2020. Preparing teacher- NEP 2020. Chaired the session in the national webinar on *National Policy on Education 2020- Akavum Puravum*, KPPM College of Teacher Education and Principals Association, Malappuram, 7–9 October.
- PATIDAR, JITENDRA KUMAR. 2020. Keynote speaker in the national conference on *Mental Health and Psychological Well-Being*, Delhi Institute of Rural Development, Nangli Poona, Delhi, 19–20 June.
- . 2020. Speaker in the webinar on *Alternative Academic Calendar at Secondary Level*, Directorate of Academic, Research and Training, Dehradun, Uttarakhand, 16 October.

DEPARTMENT OF ELEMENTARY EDUCATION (DEE)

Research Papers and Articles

- SHARMA, KAVITA. 2019. Learning Outcomes at Elementary Stage in India. *ANTRIEP*. Vol. 25, No.2. pp. 7–8.
- YADAV, PADMA. 2020. Vyaktigat aur samaj ki yogyata ka vikas. *Prathmik Shikshak*. Vol. II, pp. 35–39.

NIKALJE, V., AND BHUSHAN S. 2020. The cultural connect: Imprints of Vietnam in Indian social sciences school textbooks. *Vietnam Journal for Indian and Asian Studies*. Vol. 2, No. 1. pp. 40–52.

Paper Presentations

SANWAL, S. 2020. NCERT's initiatives in preschool education. Paper presented in the national conference on *Early Childhood Education (ECE)*, DEE, NCERT, New Delhi, 15–17 July.

———. 2020. Early Childhood Care and Education (ECCE). Paper presented in the conclave on *School Education in 21st Century under National Education Policy 2020*, Department of School Education and Literacy, Ministry of Education, Delhi, 11 September.

———. 2020. Competency based education and learning outcomes. Paper presented in the *Shikshak Parv*, Department of School Education and Literacy, Ministry of Education, Delhi, 17 September.

———. 2020. Relationship between nutrition and cognitive development, *Shikshak Parv*, Paper presented in the *Shikshak Parv*, Department of School Education and Literacy, Ministry of Education, Delhi, 25 September.

———. 2021. Developing 21st Century Skills in foundational years through STEAM. Paper presented in the national conference on *Integration of STEAM in School Education*. RIE, Bhopal, Madhya Pradesh, 26–28 February.

SONI, ROMILA. 2020. Observing and assessing early learning of young children in model preschools located in RIEs. Paper presented in the national seminar on *Emerging Trends and Issues in Learners Assessment at School Level*, RIE, Bhopal, 24–26 November.

———. 2020. Developmentally appropriate learning experiences for foundational numeracy in the model preschools of RIEs. Paper presented in the national conference on *Mathematics Education*. RIE, Bhopal, Madhya Pradesh, 20–22 December.

———. 2021. Building a foundation for STEAM through activity areas in the early childhood education programme. Paper presented in the national conference on *Integration of STEAM in School Education*. RIE, Bhopal, 26–28 February.

———. 2021. Foundational years of learning: Reflection on pedagogical practices used by the practitioners. Paper presented in the national conference on *Teacher Education in the 21st Century: Vision and Action*. RIE, Bhopal, Madhya Pradesh, 8–10 March.

———. 2020. Model preschool centers in RIEs of NCERT. Panelist in the national conference on *Early Childhood Education*. DEE, NCERT, New Delhi, 15–17 July.

CHANDRA, R. 2020. Awareness generation in Early Childhood Care and Education (ECCE). Paper presented in the national conference on *Early Childhood Education*. NCERT, New Delhi, 15–17 July.

SHARMA, K. 2021. Role of teachers in NEP 2020. Paper presented in the webinar on *NEP 2020 and Teacher Education*, DAV Management, Vasant Vihar, 10 March.

- SANGAI, SANDHYA. 2020. Classroom environment and learning outcomes: The teacher factor. Speaker in the national conference on *Early Childhood Education*, DEE, NCERT, 15–17 July.
- . 2020. ICT and learner assessment. Chaired the session in the national seminar on *Emerging Trends and Issues in Learners Assessment at School Level*, RIE, Bhopal, 25 November.
- . 2020. School Based Assessment for improving learning outcomes. Paper presented in the national seminar on *Emerging Trends and Issues in Learners Assessment at School Level*, RIE, Bhopal, 24–26 November.
- . 2021. ICT integration in teacher education. Chaired the session in the national conference on *Teacher Education in the 21st Century: Vision and Action*, RIE, Bhopal, 8–10 March.
- . 2021. Making classrooms natural by bridging the gap between theory and practice. Paper presented in the national conference on *Teacher Education in the 21st Century: Vision and Action*, RIE, Bhopal, 8–10 March.
- . 2021. STEAM as pedagogy and challenges of implementation. Paper presented in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26–28 February.
- SANWAL, S. 2020. Chaired the technical session, status, management, convergence and accreditation. Chaired the session in the national conference on *Early Childhood Education (ECE)*, DEE, NCERT, New Delhi, 15–17 July.
- . 2020. Teacher as a learner: The role of continuous professional development. Chaired the session in the national webinar on *Teacher Education: Concerns, Challenges and Innovations*, Department of Teacher Education, NCERT, 2 July.
- . 2021. Assessment of the students: STEAM and digital learning. Chaired the session in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26–28 February.

DEPARTMENT OF EDUCATION IN LANGUAGES (DEL)

Paper Presentations

- MOAZZAMUDDIN, MOHD. 2020. Munshi Premchand in the present scenario. Paper presented in the national webinar on *Relevance of Munshi Prem Chand in Present Scenario*, Baikunthi Devi Kanya Mahavidyalaya, Agra, 22 August.
- . 2020. Darul Uloom Deoband ka *Tashakhkhus aur Sahafati Khidmat*. Paper Presented in the national seminar on *Dabistan-e-Deoband ki Adabi wa Sahafati Khidmat*, NCPUL. Government of India and Islamia Educational and Charitable Society, Deoband, 19 December.

DEPARTMENT OF EDUCATION IN SOCIAL SCIENCES (DESS)

Research Papers and Articles

- SRIVASTAVA, GOURI. 2021. Media messages and the freedom struggle of India. *Asian Journal of Research in Social Science and Humanities*. Vol. 11, No. 4. pp. 7–14.

- . 2021. National Education Policy: 2020: A framework for inclusion of women as benchmark for development, *University News, A Weekly Journal of Higher Education*. Vol. 59, No. 10. pp. 5–8.
- MEENA, HARISH KUMAR. 2020. Intangible health and educational gains of migration among slum dwellers of Jaipur City. *Adhigam*. Vol. 16, pp. 127–134.
- SRINIVASAN, M.V. 2020. Corona Virus *paraval: Inthiya kalvi ethirnokkiyulla savaalkal. Puthiya Thalaimurai Kalvi*. Vol. 10, No.38. pp. 2–5.
- . 2020. *Paththam vaguppathu thervukal thevaiya. Puthiya Thalaimurai Kalvi*. Vol. 10, No.43. pp. 16–19.
- OJHA, SEEMA S. 2020. Understanding competency based learning outcomes in social sciences at secondary stage. *Adhigam*. Vol. 18, pp. 140–151.
- . 2020. *Bhartiya Shiksha Niti 2020 aur Bhartiya Gyan Parampara. Adhigam*. Vol. 17, pp. 58–64.
- . 2020. *Itihas me puratatva ka mahatva aur upyog. Voices of Teachers and Teachers Educators*. Vol. XI, No. I. pp. 36–44.

Book

- SRIVASTAVA, GOURI. 2021. *Fragrance: Bouquet of Thoughts*. Mittal Publication, New Delhi.

Paper Presentations

- SRIVASTAVA, GOURI. 2020. Promising policies enabling inclusion and equity in education. Panelist in the UNESCO-KEDI Asia-Pacific Regional Policy Webinar, *Ensuring Inclusion and Equity in Education*, 12–13 November.
- . 2020. The vision for *Swaraj*: The multipronged perspective of Mahatma Gandhi. Paper presented in the webinar on *Mahatma Gandhi Insights on Health*, National Institute of Naturopathy, Pune, 15 November.
- . 2020. Relevance of gender justice and women's right in COVID-19 Pandemic era. Paper presented in the webinar on *Relevance of Gender Justice and Women's Right in Covid Pandemic Era*. S.S. Khanna Girl's Degree College, Prayagraj, 25 July.

DEPARTMENT OF GENDER STUDIES (DGS)

Research Papers and Articles

- YADAV, MONA., AND GHOSH, R. 2020. Bridging exclusion of girls at the secondary stage of education: An analysis of the status of KGBV Girls' Hostel Scheme in Assam, India. *Journal of Exclusion Studies*. Vol. 10, No.2. pp. 92–106.

Paper Presentations

- YADAV, MONA. 2020. Addressing gender issues in education in India. Panelist in the webinar on *Addressing Gender Issues in Education in India*. Shyama Prasad Mukherjee College, Delhi University, 8 September.
- . 2020. Preparing for girls' education during and beyond COVID-19. Panelist in the webinar on *Girls' Education as Endures*, Room to Read, Delhi, 3 December.

AGRAWAL, POONAM. 2021. Issues related to education of transgender persons. Invited talk in the Consultation on *Welfare of Trans-men Population*, UNDP, 29 January.

ANAND, MILY ROY. 2020. Addressing Gender Issues in Education in India. Panelist in the webinar on *Addressing Gender Issues in Education in India*, Shyama Prasad Mukherjee College, Delhi University, 8 September.

EDUCATIONAL SURVEY DIVISION (ESD)

Research Papers and Articles

BHUSHAN, SATYA. 2020. Snakes and ladders since ancient times. *The Primary Teacher*. Vol. XLI, No. 4. pp. 53–44.

Book Chapters

BHUHSAN, SATYA. 2020. India case study in GCED learning and assessment: An analysis of four case studies in Asia. In APCEIU, *GCED learning and assessment: An analysis of four case studies in Asia*. Seoul: APCEIU.

Paper Presentations

BHADURI, INDRANI. 2021. e-ReVolution and e-EVolution in education. Paper presented in the national webinar on *Educational Technology*, Maulana Azad National Urdu University (MANUU), Central University, Hyderabad, 16 March.

———. 2021. Panelist in the Learning assessments for futures of education. Agastya, Bengaluru in association with UNESCO's *Learning to Become Initiative*, 10 February.

———. 2020. Quality learning and assessment during COVID pandemic in India. Paper presented in the webinar on COVID-19 Response, SEAMEO and Asia Pacific TWG on Education 2030+, Bangkok, 28 May.

PAJANKAR, VISHAL D. 2021. Construction of appropriate model for enrolment projection of India. Paper presented in the international conference on *Innovations and Trends in Computing*, MET Institute of Engineering, Nashik, Maharashtra, 26 February.

———. 2021. Management information system in education: Role of data analytics in decision making. Paper presented in the 23rd Annual Conference of SSCA (Online) on *Visionary Innovations in Statistical Theory and Applications (VISTA 2021)*, ICAR National Academy of Agricultural Research Management (ICAR-NAARM), Hyderabad, 24–28 February.

BHUSHAN, SATYA. 2020. Inequalities in school facilities during pandemic. Presented in a webinar on *UNESCO-Facebook Community of Practice*, UNESCO, 18 September.

———. 2020. Governance statistics: Need for numbers and numbers for need. Paper Presented in the national conference on *Statistics for Sciences, Social Sciences and Humanities*, Rajasthan Statistical Association and Department of Lifelong learning and Department of Statistics, University of Rajasthan, 1–2 March.

INTERNATIONAL RELATIONS DIVISION (IRD)

Research Papers and Articles

BHUSHAN, SATYA, MAME, OMAR DIOP, AND VARADA MOHAN NIKALJE. 2020, 25 JUNE. Ahimsa (Non-Violence), Gandhi and Global Citizenship Education (GCED). SCOO News. <https://en.unesco.org>.

BHUSHAN, SATYA, AND VARADA MOHAN NIKALJE. 2020. The cultural connect: Imprints of Vietnam in Indian social sciences school textbooks. *Vietnam Journal for Indian and Asian Studies*. Vol. 2, No. 1. pp. 39–52.

Paper Presentations

AHUJA, A. 2020. Challenges and opportunities in inclusive classroom. Paper presented in the webinar on *Inclusive Education Schools*, FDRG, AWES, 22 June.

———. 2020. Infrastructure, TLM and learning environment. Chaired the session in the national conference on *Early Childhood Education (ECE)*, DEE, NCERT, New Delhi, 15–17 July.

———. 2020. National Education Policy 2020: Challenges and opportunities vis-à-vis J&K. Chaired the session in the webinar on *Inclusive and Equitable Education*. SCERT, J&K, 19 November.

———. 2020. Educational interventions. Chaired the technical session in meet of inclusive education coordinators on *Education of Children with specific Learning Disabilities (SLD)*, NIEPA, New Delhi, 5 December.

PLANNING AND MONITORING DIVISION (PMD)

Research Papers and Articles

ASHITA, R., AND P.D SUBHASH. 2020. An analysis of the No Detention Policy in the context of the roll back debate in India. *Asia Pacific Journal of Research*. I (CVIV), pp. 45-50.

———. 2020. Enhancing socio-emotional competencies through the value-based programme- Vasudev Kutumb. *Research Review International Journal of Multidisciplinary*. Vol. 5, No. 5. pp. 50–53.

Book Chapter

ASHITA, R. 2020. Engineering industry-The linkage effect. In Mani, K.P., and Chacko, Jose (Eds.), *Indian Economy: Contemporary Issues and Comparative Analysis*. pp. 80–90. Chennai: Forschung.

DEPARTMENT OF CURRICULUM STUDIES (DCS)

Research Papers and Articles

SRIDEVI, K. V. 2020. Insights gained from implementation of vocational education programmes in Haryana. *Voices of Teachers and Teacher Educators (VTTE)*. Vol. IX, No. II. pp. 50–57.

———. 2020. Cyber security awareness among in-service secondary school teachers. *Indian Journal of Educational Technology*. Vol. 2, No. 2. pp. 82–94.

Book Chapters

- ANITA, NUNA. 2020. Gaps in the professional development in meeting academics expectation and pedagogical processes: Case studies of teachers. In Patel, R.C. and Srivastava, Sujata (Eds.), *Contemporary education in India: Policy and practice* (pp. 203–18). Vadodara: IUCTE, Faculty of Education, Maharaja Sayajirao University of Baroda.
- . 2021. Gender representation in social science textbooks: A critical analysis. In R.C. Patel and Srivastava, Sujata (Eds.), *Girl education: Status, initiatives and challenges* (pp. 113–20). Vadodara: IUCTE, Faculty of Education, the Maharaja Sayajirao University of Baroda.
- SRIDEVI, K.V. December, 2020. A book review on *Guide to blended learning* (Review of the book *Guide to blended learning*, by Marta, Cleveland-Innes., & Wilton, Dan). *Voice of Teachers and Teacher Educators*. Vol. 9, No.2. pp.105–106.

Paper Presentations

- NUNA, ANITA. 2021. Gender issues and defensive measures. Keynote address in the seminar on *Gender Sensitisation: Processes and Procedure*, IASE, Bilaspur, Chhattisgarh, 2 February.
- . 2020. Curriculum design and development. Keynote address in the webinar on *Foundation Course for DIET Faculty*. Basic Education Department, Hathras, Uttar Pradesh, 20 June.
- . 2020. Curriculum and gender inclusion. Invited speaker in the webinar on *Foundation Course for DIET Faculty*. Basic Education Department, Hathras, Uttar Pradesh, 21 June.
- SRIDEVI, K.V. 2020. NEP 2020: Need for reforms in teacher education. Paper presented in the national e-Conference on *NEP 2020 Policy Recommendations and Reflections*, Institution of Vocational Studies, New Delhi, 27 November.
- . 2020. Portfolios: What, Why and How. Paper presented in the national seminar on *Emerging Trends and Issues in Learners Assessment at School Level*, RIE, Bhopal, 24–26 November.
- . 2020. Pedagogical perspectives of NEP, 2020 on preparatory, middle and secondary stages of schooling. Paper presented in the *Shiksha Parv*, Ministry of Education, Government of India, Delhi, 23 September.
- . 2021. Incorporating 360 degree assessment in classrooms. Paper presented in the national webinar on *NEP 2020: Recommendations and Reflections*. Institute of Education, Onkarmal Somani College of Education, Mysore, 10 March.
- . 2020. A critical look at NEP 2020. Paper presented in the national level webinar on *NEP 2020*, IGNOU Regional Center, Bangalore and Vidyavardhaka First Grade College, Mysore, 17 August.
- . 2020. Teaching and skill development. Paper presented in the national webinar on *Skill Development and Inclusiveness in Teacher Education: Present Scenario and Future Challenges*, BGS B.Ed. College, Mysore, 15 October.

LIBRARY AND DOCUMENTATION DIVISION (LDD)

Research Papers and Articles

- SAMANTARAY, MOORTIMATEE. 2020. Social media for creative libraries: An analysis for strategic implementation. *IASLIC Bulletin*. Vol. 65, No. 2. pp. 84–90.
- . (In Press). Pustakalay: Vidhyalaya ka saikshnik kendra- *Prathamik Shikshak*. Vol. 45, No. 1.

CURRICULUM GROUP

Research Papers and Articles

- KOIRENG, R. R., P. C. AGARWAL, AND G. ALPANA. 2020. Influence of Dielectric Screenings on Phonon Frequencies and Acoustic Properties of pd-Based Bulk Metallic Glasses. *East European Journal of Physics* 4, pp. 84–89.
- . 2021. Phonon Dynamics and Acoustic and Thermodynamic Properties of $\text{Pt}_{57.5}\text{Cu}_{14.7}\text{Ni}_{5.3}\text{P}_{22.5}$ Bulk Metallic Glass. *J. Sci. Res.* 13 (1), pp. 21–29.

Paper Presentations

- ARORA, R. 2020. A Whole School Approach in Combating Cyber Threats. Panelist in the webinar on Cyber Security in School, NCPCR, New Delhi, 19 May.
- . 2020. NEP 2020: Curriculum and Pedagogical Reform in School Education. Paper presented in the webinar on *National Policy on Education 2020: Provisions and Recommendations in the light of School Education*, Central University of Kashmir and Indian School Psychology Association, Srinagar, 14–16 September.
- . 2020. Conducive Learning Environment in the Classroom and Beyond. Paper presented in the webinar on *Know Your Child*, SIEMAT, Prayagraj, UP, 29 October .
- . 2021. Curricular Aspects and Capacity Building/Professional Development of Teachers, made a presentation in the national webinar on Implications of NEP 2020 for Teacher Education, School of Education (SOE), IGNOU, New Delhi and Vidya Bharati Uchha Shiksha Sansthan (VBUSS), Bhopal, 25 February.
- . 2021. New Curricular and Pedagogical Structure of School Education (5+3+3+4) and Teacher Education. Invited speaker in the technical session in the national seminar on *Rejuvenation of the Teacher Education in 21st Century*, Vidya Bharathi Uchcha Shiksha Sansthan, Bhopal, M.P., 5–6 March.
- . 2021. National Education Policy, 2020 and School Education. Invited talk in the national webinar on *National Education Policy 2020: Future Vision of India*, AICTE, New Delhi, 12 March.

CENTRAL INSTITUTE OF EDUCATIONAL TECHNOLOGY (CIET)

Research Papers and Articles

- HAQUE, R. 2020. Agra Bazar ke aaine men Nazeer Akbarabadi ki shakhsiyat aur Shairi. *Urdu Duniya*. Vol. 22, No. 5. pp.17–19.
- . 2020. Cinema ki jamaliyat, Adab-o-Saqafat. *MANUU*. Vol. 10. pp. 297–307.

- . 2020. Khudkushi Nama, *Imroz*. Vol.14, No. 15. pp. 246–263.
- . 2021. Khudkushi Nama, *Isbat*. Vol. 20. pp. 156–184.
- KAUSHIK, B. 2020. Presence of children with disabilities in mainstream classroom add to the existing workload of regular teachers—Myth or real. *Journal for Applied Research*. Vol. 3, No. 1. pp. 1–6
- KAUSHIK, B., AND SAXENA, A. 2020. Making e-Learning comfortable and joyful for CWSN. *Edulinspire—An International E-Journal*. Vol. 7, No.2. pp. 52–61.
- KAUSHIK, B., AND TOMAR, P. 2020. Science teachers on students with visual impairments (SwVI) in science laboratories. *Disabilities and Impairments*. Vol. 34, No. 1. pp. 49–58.
- KAUSHIK, B. 2020. Good practices of inclusion in education across India—A study. *IJTIE, Infonomics Society*. Vol. 9, No.2. pp. 1620–1625. <https://infonomics-society.org>.
- . 2021. ICT infused print to audio textbooks: Studying the effect on English and Hindi reading comprehension in inclusive classroom. *IJET*. Vol. 3, No. 1. pp. 23–37
- PRABHA, S. 2020. Students’ views on difficulties in conceptual understanding of science at secondary stage . *The Eurasia Proceedings of Educational and Social Sciences*. Vol. 16, pp. 1–10.

Book

- FAROOQUI, S.R. 2021. *Qabz e Zaman* (R. Haque, Trans.). Rajkamal Prakashan. (Original work published 2014)

Paper Presentations

- BEHERA, A.P. 2020. ET-ICT. Paper presented in the *Shikshak Parv*, MoE, Government of India, 7 September.
- . 2020. Digital online education in COVID-19 situation. A case presentation from India. Panelist in the webinar on *Addressing Challenges Posed by Mass Closure of Schools during the COVID-19 Pandemic, Lessons from International Contexts*, Mauritius Institute of Education, Mauritius. 26 June.
- KUMAR, A. 2020. An interactive dialogue on NEP 2020. Panelists in the *National Education Policy 2020: Transforming India’s Education System*, Jagran Josh, 6 August.
- PRABHA, S. 2021. Implementation of NEP 2020: ICT based teaching and learning resources. Chaired the session in the international conference on *ICT in Education: Emerging Trends in Education*, CIET, New Delhi, 25 March.

DEPARTMENT OF EDUCATION IN ARTS AND AESTHETICS (DEAA)

Research Papers and Articles

- BANERJEE, SARVARI. 2020. Innovative learning in Indian music through ICT. *Sangitika*. Vol. 11, pp. 13–20.

Book Chapter

- BANERJEE, SARVARI. 2020. Music therapy – Music to heal your mind, body and soul. In Kavya, Lavanya Kriti Singh (Ed.), *Kavya, savanya kirti*. (pp.30–40). New Delhi: Maharani Publishing House.

REGIONAL INSTITUTE OF EDUCATION, AJMER

Research Papers and Articles

- MEENA O.P. 2020. Corrosion inhibition effect of aluminium by aerial parts of Phyllanthus Niruri in nitric acid and extract as antibacterial. *IOSR Journal of Applied Chemistry*. Vol. 13, No. 7. pp. 22–32.
- . 2020. Corrosion inhibition of aluminium by extract of aerial parts of Phyllanthus Niruri in nitric acid and extract as anti-fungal. *International Journal of Analytical and Modal Analysis*. Vol. 12, No. 8. pp. 503–520
- . 2020. Biocatalyst reduction of furfural using free and immobilised Baker's Yeast. *ChemTech Research*. Vol. 14, No.1. pp. 263–267.
- PAREEK, R.B., AND MEENA, O.P. 2020. Impact study of e-content on teaching learning of science. *IOSR Journal of Research and Method in Education*. Vol. 10, No. 4. pp. 18–23.
- SHARMA, R. K. 2020. Synthetic and computational studies on CuI/ligand pair promoted activation of C(Aryl)-CI bond in C-N coupling reactions. *Heliyon*. Vol. 6, No. 2. <https://doi.org/10.1016/j.heliyon.2020.e03233>.

REGIONAL INSTITUTE OF EDUCATION, BHOPAL

Research Papers and Articles

- SOURABH, ARNAB. 2020. Mrityu: sa mrityungchati ch inhnyate paryati anhad. *Anhad*. Vol. 9, p. 8.
- SETHY, P.N. 2020. Changing occupational structure of workers in KBK districts of Odisha. *Journal of Development Economics and Management Research Studies*. Vol. 6, No. 6. pp.17–28, <http://www.cdes.org.in/Journal>.
- . 2021. Economic implication of Gandhian and Deendayal ideology in the context of Post-Covid-19 Pandemic. *Journal of Development Economics and Management Research Studies*. Vol. 7, No. 7 pp. 65–77. <http://www.cdes.org.in/Journal>.
- . (In Press). Pedagogical process and issues of learning in social studies classroom at upper primary schools nearby slum area of Maharashtra State. *Journal of Indian Education*. Vol. 50, No. 4.
- SHARMA, RASHMI. 2019. Use of senior secondary chemistry laboratory kit for the promotion of practical skills amongst students in the state of Madhya Pradesh, *RIE Bhopal Journal of Education*. Vol. 3, No. I. pp. 87–92.
- . 2020. Attainment of learning outcomes in chemistry by senior secondary students of Goa, *RIE, Bhopal Journal of Education*. Vol. 3, No. II. pp. 74–93.
- CHOUHAN NARENDRA, RASHMI SINGHAI AND S.K. SHARMA. 2020. Rhizosphere effect on the availability of phosphorus to soyabean crop, *Advances in Bioresearch*. Vol. 11, No. 1. pp. 16–21.
- . 2020. Assessment of suitability of soil test method for available-P estimation to soybean grown in Vertisols, *Plant Archives*. Vol. 20, No. 1. pp. 2987–2995.
- KANAKRAJ, SANGEETA, AND RASHMI SINGHAI. 2020. Impact of biodegradable behaviour of diesel fuels with biodiesel blending: A review. *Journal of Biofuels*. Vol. 11, No. 1. pp. 35–46.

- PRAJAPATI, R.P. 2020. Recovery of molybdenum (Mo) metal from spent catalysts by bioleaching, *WJPLS*. Vol. 6, No.9. pp.178–184.
- . 2020. Science teaching through 5E learning concept. *JETIR*. Vol. 7, No.8. pp. 896–900.
- . 2020. Understanding of science concepts using practical skills at schooling. *JETIR*. Vol. 7, No.9. pp. 101–109.
- . 2020. Inculcation of teaching-learning process through constructivist approach in chemistry of atomic structure concepts at schooling. *JETIR*. Vol. 7, No.9. pp. 897–901.
- . 2020. Eco-friendly chelating agents for extraction of metal from spent catalysts of fertiliser industry. *JETIR*. Vol. 7, No. 10. pp. 3717–3729.
- PRAJAPATI, R.P., AND RASHMI SINGHAL. 2020. Minimisation of industrial waste water containing heavy metals on environment. *Research Inspiration*. Vol. 5, No.II. pp. 1–9.
- . 2020. Impact of COVID-19 on global environment and sustainable development. *WJPLS*. Vol. 6, No. 10. pp. 125–132.
- . 2020. Extraction of nickel from spent catalyst coming out from fertiliser industry. *WJPLS*. Vol. 7, No. 1. pp.140–142.
- SARKAR, SHIVALIKA. 2021. Teacher’s experiences of online teaching during COVID-19 Pandemic and e-Moderation. *United International Journal for Research and Technology*. Vol. 2, No.5. pp. 10–15.

Book

SOURABH, ARNAB. 2020. *Kisi aur bahane se*. New Delhi: Bhartiya Gyanpeeth

Chapter in Book

SETHY, P.N. 2020. Behaviour towards digital transaction in rural economy: A case study of two villages of Shajapur district of Madhya Pradesh. In Agrawal, Rajiv Kumar., and Surya, Pushpender Kumar (Eds.), *Digitalisation of Indian Economy: An Engine of Sustainable Growth* (pp. 18–40). Delhi: Manisha Publication.

Paper Presentations

- GARG, ASHWANI. 2020. Bhopal sheher ki jhuggi bastiyon mein rehne wale vidhyarthiyon dwara ganit ke prashno mein ki jane wali galtiyon ka adhyayan. Paper presented in the national conference on *Mathematics Education*, RIE, Bhopal, 20–22 December.
- MAHTO, GANGA. 2020. An action research on developing examination skills through group mock assessment of English at senior secondary level to improve learners performance in board examinations. Paper presented in the national seminar on *Emerging Trends and Issues in Learners Assessment at School Level*, RIE, Bhopal, 24–26 November.
- SETHY, P.N. 2020. Project-based training of pre-services preschool teachers’ preparation. Paper presented in the national conference on *Early Child Care Education (ECCE)*, DEE, NCERT, New Delhi, July 15–17.
- . 2020. A critical analysis of Atmanirbhar Bharat for sustainable rural livelihood during Post-Covid-19 Pandemic. Paper presented in

- the international webinar on *Impact of Covid-19 on Rural development*, Department of Economics, A.S. College, Deoghar, Jharkhand, 7–8 August.
- . 2020. Externalities of COVID-19 on India's trade and environment: An analysis of macroeconomics policies measures. Paper presented in the interdisciplinary international webinar on *COVID-19 and Environmental Issues*, Department of Economics, Department of Botany, Department of Zoology and Department of Education, A.S. College, Deoghar, Jharkhand, September, 25–26.
- . 2020. Project-based learning assessment of learner in economics at higher secondary level. Paper presented in the national seminar on *Emerging Trends and Issues in Learners assessment at School Level*, RIE, NCERT, Bhopal, 24–26, November.
- . 2020. Mathematics as pedagogical tools in economics studies. Paper presented in the national conference on *Mathematic education*, RIE, Bhopal, 20–22 December.
- . 2020. Challenges and opportunities of digital transaction in rural economy. Paper presented in the *Annual Conference of Indian Economic Association*, Dr. Bhimrao Ambedkar University, Agra, December 27–29.
- . 2021. STEAM integrated approach in economics learning. Paper presented in the national conference on *Integration of STEAM in school Education*, RIE, Bhopal, 26–28 February.
- . 2021. Computer application in economics for pre-service teacher education programme: An innovative practice. Paper presented in the national seminar on *Teacher Education in the 21st Century: Vision and Action*, RIE, Bhopal, 8–10 March.
- SARKAR, SHIVALIKA. 2020. Assessing student performance in a project-based learning environment. Paper presented in the national seminar on *Emerging Trends and Issues in Learners' Assessment at School Level*, RIE, Bhopal, 24–26 November.
- . 2020. Bringing STEAM in the high school science classroom. Paper Presented in the national conference on *Mathematics Education*, RIE, Bhopal, 20–22 December.
- . 2020. On the implementation of a STEAM model in the high school science classroom. Paper presented in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26–28 February.
- . 2021. Teachers' experience of online teaching learning during COVID-19. Paper presented in the national conference on *Teacher Education in the 21st Century: Vision and Action*, RIE, Bhopal, 8–10 March.
- RATNERE, SANDEEP. 2021. STEM Makerspace @School: In the scenario of National Education Policy 2020. Paper presented in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26–28, February.
- PETHIYA, SANGEETA. 2021. Online Internship program: An Innovative Initiative in COVID-19 Situation. Paper presented in the national seminar on *Teacher Education in the 21st Century; Vision And Action*, March 8–10.
- PETHIYA, SANGEETA. 2020. Incorporating Global Citizenship Education in Math Education. Paper Presented in the national conference on *Math Education*, 20–22 December.

- . 2021. Bringing STEAM for 21st Century skills in history classes. Paper presented in the national conference on *Integration of STEAM in School Education*, 26–28 February.
- KHOBUNG, VANTHANGPUI. 2020. Assessment in political science: Perspectives and trend. Paper presented in the national seminar on *Emerging Trend and Issues in Learners' Assessment at School Level*, RIE, Bhopal, 24–26 November.
- . 2020. Integrating STEAM in teaching legislative process and procedures through simulation. Paper presented in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26-28 February.

REGIONAL INSTITUTE OF EDUCATION, BHUBANESWAR

Research Papers and Articles

- AGARWAL, P.C., AND UDDIN, M.J. 2020. Impact of pedagogical practices on academic achievement and thinking style of learners in physical science. *International Journal of Advanced Education and Research*. Vol. 5, No. 5. pp. 42–47.
- . 2020. Teaching-learning strategies for the improvement of science education in government schools in India. *IOSR Journal of Humanities and Social Science*. Vol. 25, No. 9. pp.17–22.
- AGARWAL, P.C., R.R. KOIRENG, AND A. GOKHROO. 2020. Influence of dielectric screenings on phonon frequencies and acoustic properties of Pd-based bulk metallic glasses, *East Euro. J. of Phys.* Vol. 4. pp. 84–89.
- . 2021. Phonon dynamic and acoustic and thermodynamic properties of Pt_{57.5} Cu_{40.7} Ni_{5.3} P_{22.5} bulk metallic glass. *Journal of Scientific Research*. Vol. 13, No.1. pp. 21–29.
- AGARWAL, P.C., N. PATHAK, T.S. GILL, AND S. KAUR. 2020. Characteristics of spatiotemporal dynamics of a quadruple Gaussian laser beam in a relativistic ponderomotive magnetized plasma. *Journal of the Optical Society of America*. Vol. 37, No. 10. pp. 2892–2900.
- AGARWAL, P.C. 2020. E-shiksha aur bhavishya. *Shaikshik Manthan*. Vol. 12, No.11. pp. 24–26.
- . 2020. Sanskriti, sanskrit aur shiksha, *Shaikshik Manthan*. Vol. 12, No. 12. pp. 21–23,
- . 2020. Swadeshi se hi atmanirbharata. *Shaikshik Manthan*. Vol. 13, No. 5. pp. 9–2,
- . 2021. Kaushal vikas aur shiksha. *Shaikshik Manthan*. Vol. 13, No. 8. pp. 5–7.
- BASU, M., AND R. MOHALIK. 2020. Effectiveness of Arts Integrated Learning (AIL) in developing conceptual understanding in geography at elementary level. *Pedagogy e-Journal*. Vol. 3, No. 110. pp. 1–17.
- BHATTACHARYA, D., AND R. MOHALIK. 2020. Digital mind mapping software: A new horizon in the modern teaching learning strategy. *Journal of Advances in Education and Philosophy*. Vol. 4, No. 10. pp. 400–406.

- . 2021. Factors influencing students' higher order thinking skills development. *Education India Journal: A Quarterly Refereed Journal of Dialogues on Education*. Vol. 10, No. 1. pp. 348–361.
- DASH, RITANJALI, AND KARANISHA. 2020. Labour issues and labour laws in India, policy-2020, *Online International Interdisciplinary Research Journal*. Vol. 10, No. 4. pp. 62–67.
- DASH, RITANJALI. 2021. Employability in India and New Education Policy 2020. *Online International Interdisciplinary Research Journal*. Vol. II, pp. 69–74.
- DASH, S.K. 2021. A comparison study on molecular interaction of an acidic organ phosphoric extractant with substituted aromatic hydrocarbon (p-xylene/toluene) at 303.15K. *Bio Interface Research in Applied Chemistry Platinum Open Access Journal*. Vol. 11. pp. 10052–10058.
- DEEPSHIKHA, MOHALIK, R., AND MOHAPATRA, A.K. 2021. Impact of ICT integrated pedagogy on children's comprehension and learning outcomes in science at upper primary level. *Asian Journal of Education and Social Studies*. Vol. 15, No. 1. pp. 23–37.
- MOHALIK, R. (In press). Reorganization and merger of schools at elementary level in Jharkhand: Views of Stakeholders. *Journal of Indian Education*. Vol. 50, No. 4.
- MOHALIK, R., AND S. PODDAR. 2020. Effectiveness of webinars and online workshops during the COVID-19 pandemic. *Technology Resources in Education e-Journal*. Vol. 3, No. 71. pp.1–13.
- MOHALIK, R., AND S.S. SAHOO. 2020. e-Readiness and perception of student teachers towards online learning in the midst of COVID-19 Pandemic. *Technology Resources in Education e-Journal*. Vol. 3, No. 61. pp.1–16.
- . 2021. Accessibility, competency and perception of school teachers towards online teaching in the midst of COVID-19 Pandemic. *Coronavirus and Infectious Diseases Research e-Journal*. Vol. 2, No. 85. pp. 1–17.
- MOHALIK, R. 2020. Digital literacy and its use by teacher trainees at secondary level in Odisha. *Randwick International of Education and Linguistics Journal Science*. Vol. 1, No.2. pp. 242–250.
- OJHA, S., A. ROY, AND A.K. MOHAPATRA. 2021. Environmentally relevant concentrations of Cadmium impair morpho-physiological development and metamorphosis in *Polypedates maculatus* (Anura, Rhacophoridae) tadpoles. *Environmental Chemistry and Ecotoxicology*. Vol. 3, pp. 133–141.
- PANDA, B.N. 2019. Effectiveness of ICT integrated teaching in developing higher order skills among standard VIII students in science. *Journal of AIAER*. Vol. 31, No. 1&2. pp. 3–13.
- SATAPATHY, M.K. 2021. Addressing the issues of hidden hunger: Looking for plants as food resources in the wild. *International Journal of Education and Social Science*. Vol. 1. pp.11–21.
- . 2021. Indigenous knowledge and practices on conservation of resources by tribal communities of Koraput district of Odisha. *India Environment and Ecology*. Vol. 38, No. 4. pp. 1–33.
- . 2021. Plant community analysis of Bhubaneswar smart city, Odisha. *India Journal of Ecology*. Vol. 48, No. 1. pp.147–153.

Books

- AGARWAL, P.C. 2020. *Gauge Hierarchy Problem and its Solution in SUSY*. Mauritius and Eastern Europe: Lap Lambert Academic Publishing.
- SATAPATHY, M.K. 2021. *Widening the Food Basket: Underutilised and Underexploited Food Resources*. New Delhi: New India Publishing Agency.
- KAPOOR, S. 2020. *B-spline Finite Element Method*. Lambert Academic Publishing House.

Book Chapters

- BEHERA, L. AND A. KUMAR. 2020. Implementation of government public policy for inclusive and equitable quality education towards sustainable development. In Priyadarshini, N. (Ed.), *Sustainable Development and Education*. pp. 267–275. New Delhi: Discovery Publishing.
- . 2020. School based activities in pre-service teacher education: Towards inculcation of peace and values. In Swain & Das, R. (Eds.), *Peace Education*. pp. 76–88. Raleigh, US: Lulu.com.
- . 2020. Trends in ICT integrated teacher education. In Mishra, M., and Mahapatra, B. (Eds.). *Information and Communication Technology (ICT) Enabled Teaching Learning in Contemporary Teacher Education*. pp. 60–76. Lucknow: Book Publication.
- KAPOOR, S. 2020. Structured and holistic approach for educational research proposal development. In Ram, M., Nautiyal, O.P., and Pant, D. (Eds.), *Scientific Methods Used in Research and Writing*. pp. 49–57. Boca Raton, Florida: CRC Press, Taylor and Francis Group.

Paper Presentations

- AGARWAL, P.C. 2020. Impact of Covid-19 Pandemic on Education in Socio-Economic Development: Challenges and Best Practice. Invited talk in the international webinar on *Impact of Covid-19 Pandemic on Education and Socio-Economic Development: Challenges and Best Practices*, Department of Education, Aliah University, Kolkata, 19 July.
- . 2020. Journey from metallic glasses to bulk metallic glasses: Development, applications and structures. Invited talk in the national webinar on *Bulk Metallic Glasses: Emerging Materials Development, Structural Science and Technological Application*, Kamla Nehru College for Women, Jai Narain Vyas University, Jodhpur, 24 August.
- . 2020. *Life skills education*. Invited talk in the national level seminar on *Life-Skill Education in the context of NEP 2020*, ODM Public School, Bhubaneswar, Odisha, 15 January.
- . 2020. Metallic glass: Emerging materials development, structural science and technological applications. Invited talk in the national webinar on *Recent Trends in Physics*, Department of Physics, SPC Government College, Ajmer, 31 July.
- . 2020. Practices of STEAM education at national and global level. Chaired the session in the national conference on *Integration of STEAM in School Education*. RIE, Bhopal, 26–28 February.

- . 2020. Silent features of NEP 2020. Invited talk in the webinar on *National Education Policy 2020: A Critical Discussion*, Neeraj Memorial College, Kota University, Kota, Rajasthan, 27 September.
- . 2021. Keynote address in the state level seminar on *Implementation of National Education Policy 2020 and Teacher Education*, IITE, Gandhinagar and Vidya Bharti Uchcha Shiksha Sansthan, India, Gandhinagar, 8 February.
- BEHERA, L. 2020. National Education Policy 2020: Transformational reforms in school education. Keynote speaker in the State level webinar on *NEP and School Education, 2020*, OPS Mahavidyalaya, Hindol Road, Dhenkanal, 12 December.
- . 2020. National Policy on Education 2020: Major reforms in school education. Keynote speaker in national webinar on *School Education and Teacher Education in NEP 2020*, Bankura University, 9 September.
- . 2020. NEP 2020: Reforms in school education. Keynote speaker in national webinar on *NEP and School Education*, Marshaghai College, Odisha, 26 August.
- . 2020. Paradigm shift in policies on school education in India. Keynote speaker in the national webinar on *Paradigm Shift in Education*, Siliguri B.Ed. College, 19 August.
- GOWRAMMA, I.P. 2020. Function of schooling-dream to reality. Panelist in the national webinar on *Decoding National Educational Policy: A National Dialogue with Regional and Cultural Aspiration*. Brajrajnagar College Government Elementary Teacher Education and Brajraj Nagar, Jharsuguda Institute Baripada, Mayurbhanj, Odisha, 17 October.
- . 2020. Mohan and Kastur-Gandhi from the perspective of his wife. Paper presented in the national webinar on *Gandhi and Women*. Central University Pondicherry, Centre for Women Studies, 18 August.
- . 2020. Preparing to teach all students for learning. Paper presented in the national webinar on *Skill Development and Inclusiveness in Teacher Education-Present Scenario and Future Challenges*, BGS B.Ed. College, University of Mysore, 15 October.
- KAPOOR, S. 2020. Modelling and fluid flow stability in a vertical pipe under LTNE Model. Invited speaker in the webinar series-2020 *Mathematical Modelling and its Applications*, School of Arts, Science and Humanities (SASH) - SASTRA Deemed University, Thanjavur, 28 December.
- . 2020. Stability of double diffusive mixed convective flow in vertical pipe filled with Porous Medium under LTNE Model. Chaired the session in the international conference on *Advances on Differential Equations and Numerical Analysis (ADENA 2020)*, IIT Gawain, 12–14 October.
- . 2020. Velocity variation in double diffusive mixed convection in vertical system filled with porous medium. Paper presented in the national conference on *Mathematics Education*, RIE, Bhopal, 21 December.
- . 2020. Best innovative practices in mathematics education. Chaired the session in the national conference on *Mathematics Education*, RIE, Bhopal, 20–22 December.

- . 2020. Computer science and soft computing (2.2 and 2.7). Chaired the session in the international conference on *Mathematical Techniques in Engineering Applications*, Graphic Era University, Dehradun, 5 December.
- . 2020. Fluid dynamics. Chaired the session in the international conference on *Advances on Differential Equations and Numerical Analysis (ADENA 2020)*, Department of Mathematics, IIT Guwahati.
- . 2020. Mathematics learning: Issues and concerns in the national conference on *Mathematics Education*, RIE, Bhopal, 20–22 December.
- KETAKI, K. 2021. Challenges to internationalisation of higher education. Presented a paper in the national seminar on *New Education Policy and Internationalisation of Higher Education in India: Opportunities and Challenges*, Utkal University, Bhubaneswar, Odisha, 25–26 March.
- . 2021. The role of e-Government in education system of India. Paper presented in the national conference on *Integration of STEAM in School Education*, RIE, Bhopal, 26–28 February.
- MOHALIK, R. 2020. Alternative assessment and evaluation in teacher education. Chaired the session in the international webinar on *Assessment and Evaluation in Teacher Education*, MGAHV, Wardha, 16–17 June.
- . 2020. ICT based teaching during the pandemic. Invited talk in the national webinar on *ICT based Teaching during the Pandemic*, GC Paul College of Education, Assam, 16 May.
- . 2020. Perspectives of online courses in higher education. Invited talk in the international virtual conference on *World after Covid-19: The Future of Higher Education*. Southfield College, Darjeeling, West Bengal, 3–4 August.
- . 2020. Quality assurance in teacher education. Chaired the session in the national webinar on *Post Pandemic Quality Assurance in Higher Education*, Mazbet College, Assam, 14 August.
- . 2021. Indian higher education and role of teachers for capacity building as envisioned in NEP 2020. Invited talk in the national webinar on *NEP 2020: Revisiting Ancient Indian Knowledge System for Atmanirvihar Bharat*, IGNOU, RC Itanagar, Arunachal Pradesh, 28 February.
- . 2021. Relevance of 21st Century Skills for students. Keynote speaker in the international webinar on *Education for 21st Century Skills; Prospectus for School and Higher Education*, Udala College, Udala, Odisha, 5 March.
- PANDA, B.N. 2020. Keynote speaker in the national webinar on *NEP 2020- Issues and Challenges*, Admas University, Kolkata, 10 May.
- . 2020. Keynote speaker in the national webinar on *Qualitative Data Analysis*. Kumarmangalam University, Noida, UP, 22 May.
- . 2020. Keynote speaker in the national webinar on *Tribal Education: Problems and Prospects in 21st Century*, Kalinga Institute of Social Sciences University, Bhubaneswar, 12 June.
- . 2020. Keynote speaker in the national webinar on *Qualitative Research: An Investigation into the Reasoning Behind Human Behaviours*, Kumarmangalam University, Noida, UP, 23 June.
- . 2020. Keynote speaker in the national webinar on *Qualitative Approaches of Scientific Enquiry*, G.M. University, Sambalpur, 9 July.

- . 2020. Keynote speaker in the national webinar on *Experiential Learning and Gandhiji's Nai talim*, Fakir Mohan University, Balasore, Odisha, 3 July.
- . 2020. Keynote speaker in the national webinar on *Higher Education: Retrospect and Prospect*, Ramadevi University, Bhubaneswar, Odisha, 17 July.
- . 2020. Keynote speaker in national webinar on *National Education Policy 2020 and 4 Year Integrated Teacher Education Programme and its Implementation*, Banaras Hindu University, Varanasi, UP, 14 September.
- . 2020. Panelist in international webinar on *Development of Guidelines on Research Ethics*, AIAER, Pondicherry University, Tamil Nadu, 10 October.
- . 2020. Teacher education in NEP 2020. Invited speaker in the national webinar on *National Education Policy*, Brajarajpur College, Rourkela, Odisha, 11 October.
- . 2020. Educational transformation in the era of Covid-19: Challenges and issues. Invited speaker in the national webinar on *National Education Policy*, AIAER, Puducherry, Tamil Nadu, 31 October.
- . 2020. Keynote speaker in national webinar on *Professional Development of Teachers*, Rajasthan Central University, Ajmer, 7 November.
- . 2020. School education and NEP-2020. Invited as a speaker in the National Education Policy, F.M. University, Balasore, Odisha, 16 November.
- . 2021. Keynote speaker in the national webinar on *Transforming Teacher Education: Possibilities and Opportunities*, Don Bosco University, Guwahati, 22 February.
- . 2021. Keynote speaker in the national webinar on *Professional Development of Teachers*, Kolkata University, Kolkata, 23 February.

Regional Institute of Education, Mysuru

- MURTHY, C.G.V. 2020. Presence of calling work orientation among higher secondary and college teachers in Mysore. *Journal of Psychosocial Research*. Vol. 15, No. 1. pp. 365–375. DOI <https://doi.org/10.32381/JPR.2020.15.01.31>.
- . 2020. Retirement transitions and anxiety among bank employees. *Journal of Psychosocial Research*. Vol. 15, No. 2. pp. 11–22. DOI <https://doi/10.32381/JPR.2020.15.02.2>.
- . (In Press). Retirement transitions and anxiety among teachers. *Journal of Indian Education*. Vol. 50, No. 4.

NORTH EAST REGIONAL INSTITUTE OF EDUCATION, UMIAM (MEGHALAYA)

Research Papers and Articles

- DEVI, CH. SARAJUBALA. 2020. A pragmatic study of some Manipuri and Assamese metaphorical proverbs. *Language in India*. Vol. 20, No. 7. pp. 181–201.

- . 2021. Hindu religious literature and cultural transformation in Manipur. *South Asian Research Journal of Arts, Language and Literature*. Vol. 3, No. 1. pp. 13–17.
- . 2021. Social dynamics and changing male and female speech differences in Meiteilon. *Language in India*. Vol. 21, No. 2. pp. 143–159.
- DEVI, CH. SARAJUBALA, AND DEVI, PH. BRAJAYANTI. 2021. Reviving government schools: A case of innovation in Poirou Khongjin High School, Imphal. *Journal of Humanities and Social Science*. Vol. 26, No. 3. pp. 32–38.
- WALLANG, M.G. 2020. Sustaining digital language resources and sign language. *Indian Journal of Educational Technology*. Vol. 2. No. 2. pp. 138–151.
- . 2020. Deafness and a village sign language community in Meghalaya. *Language in India*. Vol. 20, No. 11. pp. 59–72.
- KHARLUKHI, B., AND B.R. DKHAR. 2021. A study on functioning of school management committees in elementary schools of Ri-Bhoi and West Jaintia Hills District of Meghalaya, *International Journal of Recent Scientific Research*. Vol. 12, No. 3. pp. 41216–41219.
- SEEMA, R. 2020. Imbibing values through science education. *Voice of Teachers and Teacher Educators*. Vol. IX, pp. 20–26.

Book Chapters

- DKHAR, B.R. 2021. Application of Constructive Pedagogy in Classroom Processes. In Basantia, T.K. (Ed.), *Pedagogy in School*. (pp. 65–79). New Delhi: Atlantic Publishers and Distributors.
- DEVI, CH. SARAJUBALA. 2020. Coping stress: Revitalising community's role as a support system. In Devi., and Manitombi K. (Eds.), *Stress Management and Higher Education* (pp. 147–162). New Delhi: Sunmarg Publishers and Distributors.
- WALLANG, M.G., AND KHARLUKHI, B. 2020. Addressing quality inclusive education in the approaching situations. In Vanitha, C. (Ed.), *Recent Trends in Inclusive Education* (pp. 163–174). New Delhi: Today Tomorrow's Printers and Publisher.
- SHARMA, U. 2021. Facilities available in schools for teaching children with special needs. In Vanitha, C. (Ed.), *Recent Trends in Inclusive Education* (pp. 203–209). New Delhi: Today Tomorrow's Printers and Publisher.

Paper Presentations

- DKHAR, B.R. 2020. Sustainable Development Goals in Education as per NEP, 2020 with best practices across the North-Eastern States. Paper presented in the national webinar on *Sustainable Development Goals (SDGs) in Education*, Education Department, NEHU, Shillong, 18–19 March.
- DKHAR, B.R., AND KHARLUKHI, BASANSY. 2020. Factors affecting enrolment in the government schools at elementary level. Paper presented in the international multidisciplinary e-Conference on *Modern Trends in Education and Educational system: Issues and Challenges*, MNR Rural PG College of Education, Sangareddy and The School of Education, Osmania University, Hyderabad, 28–29 October.

- DEY, T. 2021. Quality education and sustainable development: A few experiential accounts of the State of Assam. Paper presented in the NEC sponsored national seminar on *Education and Sustainable Development: Issues and Challenges in context to North-East India*, K.C. Das Commerce College, Guwahati, 8–9 January.
- DEVI, CH. SARAJUBALA. 2020. Bringing mother tongues in schools of North-East India. Paper presented in the national seminar on *Issues and Challenges in Minority Language Education*, NERIE, Umiam, 23–25 November.
- WALLANG, M.G., AND KHARLUKHI, B. 2020. Addressing quality inclusive education in the approaching situations. Paper presented in the national webinar on *Recent Trends in Inclusive Education*, School of Education, Central University of Kerala, 2–3 November.
- WALLANG, M.G. 2020. Supporting L2 proficiency of visual learner. Paper presented in the international multidisciplinary e-Conference on *Modern Trends in Education and Educational System*, MNR Rural College of Education, 28 October.
- . 2020. The Furore towards standardisation of Indian Sign Language: Concerns in school education. Paper presented in the national webinar on *Issues and Challenges of Minority Language Education*, NERIE, Umiam, 23–25 November.
- KHARLUKHI, B., B.R. DKHAR AND R. BALAIADA. 2020. Promoting mental well-being among school students in the present pandemic situation. Paper presented in the international multidisciplinary webinar on *Living with Covid-19: Impact on Higher Education in India and Bangladesh*. Institute of Education and Research (IER), Jagannath University, Dhaka, Bangladesh and Council for Educational Administration and Management (CEAM), India and Council for Teacher Education Foundation, Bangladesh, 10–12 October.
- GHILDYAL, P. 2020. Rain rain go away or should it? An analysis of the nursery rhymes for their socio-emotional impact. Paper presented in the national conference on *ECE, DEE, NCERT Delhi*, 15–17 July.
- . 2020. Language shift-Volitional or systemic. Paper presented in the national seminar on *Issues and Challenges in Minority Language Education*, NERIE, Umiam, 23–25 November.
- DKHAR, B.R. 2020. Initiatives and innovative practices towards teaching learning process and school development. Chaired the session in the webinar on *Initiatives and Innovative Practices towards Teaching Learning Process and School Development*, DIET, West Sikkim, 3–4 September.
- . 2021. NEP 2020 and transformational reforms in teacher education. Invited speaker in the national level webinar on *NEP 2020 and Transformational Reforms in Teacher Education*, Patharkandi College of Education, Assam, 25 March.

Ph.D. Degrees awarded during the year under the supervision of 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.	Social Media Use by Pre-service Teachers	Gowamma I.P.	Abhay Parida	RIE, Bhubaneswar	Utkal University	2020
2.	Secondary Level Pre-service Teacher Education Programme of West Bengal: Analysis in the Light of NCTE	Behera L.	Hossain, A.	RIE, Bhubaneswar	Utkal University	2020
3.	Communication Problems in English among Rural Students Colleges under Mysore University	Vidyapa C.	Karunakaran B. Shaji	RIE, Mysuru	Bharathiar University	2021
4.	A Cultural Study of the Novels of Chinua Chebe	Lavanya S.K.	Karunakaran B. Shaji	RIE, Mysuru	Bharathiar University	2021

Awards and Fellowships

A. NCERT Doctoral Fellowships 2020

S.No.	Name and Address of the Doctoral Fellows	Title of the Thesis
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 Program in Assam
3.	Paridhi Joshi IGNOU, New Delhi	Teacher's 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 School 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 Programs
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 <i>Bhagavad Gita</i> for Emotion 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 2019–20

S.No.	Topic or Title	Name and Designation of the Project Coordinator	Name of the School/ Teacher Education Institutions
1.	<i>Kaksha-Kaksh Me Hindi Bhasha Shikshan Ko Ruchikar Va Anandayak Banane Hetu Navachari Shikshan Adhigam Samagri Ka Nirman Va Uska Kriyanwaya</i>	Vijay Kumar Chawla <i>PGT, Hindi</i>	Government Model Sanskriti Senior Secondary School (2186) Keorak, Kaithal – 136207 Haryana
2.	I-Movie Preparation on a Subject Topic by use of Features of Android Mobile for Revision Purpose (Use of ICT In Education)	Sheela Asopa <i>Principal</i>	Government Senior Secondary School Dhawas, Block-Luni Distt. Jodhpur – 342014 Rajasthan
3.	Skill Development Programme to Prepare Competent Teachers	Jasdeep Kaur and Shilpa Kaur <i>Assistant Professors</i>	BCM College of Education, Sec-32 A Urban Estate Chandigarh Road, Ludhiana – 141010 Punjab
4.	Poetic Presentation of Mathematics and its Pedagogy	Shashikant Pandey <i>Assistant Professor</i>	Maharaja Surajmal Institute (Affiliated to GGSIP University) C-4, Janakpuri Delhi-110058
5.	Snakes and Ladders (A Play-way Approach of Teaching in Mathematics for Class I)	Varinder Kumar <i>Head Teacher</i>	Government Primary School Village-Machaki Mal Singh, P.O. Sandhwan Distt. Faridkot-151209 Punjab
6.	To Assess and Enhance Physical Environmental Awareness among the Elementary School Students	Pankaj Kumar Sharma <i>TGT Science</i>	Government Middle School Village-Bhoewali Tehsil-Ajnala, Amritsar Punjab – 143102
7.	Integrated and Collaborative Teaching Learning (ICTL) Model to Meet the Challenges of Students, in and out of the Classroom: An Experimental Study	Susamma Johnson <i>Assistant Professor</i>	State Institute of Science Education, PSM Campus Jabalpur- 482001 Madhya Pradesh

8.	Impact of the ARCS Blended Teaching Learning Programme on Teaching and Learning of Environmental Science at Primary level	Gargee Mitra <i>Deputy Head</i>	Symbiosis School Central Directorate (SSCD), Symbiosis School, 15 th Lane Kashinath Shastri Abhyankar Road Deccan Gymkhana, Pune – 411004 Maharashtra
9.	Don't Say It Problem, It Is A Solution Nature Gifted Me Precious Menstruation	Sarika Dhanya Kumar Jain <i>Secondary Teacher</i>	Zilla Parishad Secondary School, Ladsawangi TQ and Distt. Aurangabad – 431007 Maharashtra
10.	Developing a Sense of Preserving Indian Culture among Students through Performing Art Education— Dance	Nilesh Arvindbhai Parekh <i>Dance Teacher</i>	Navrachana Vidyani Vidyalaya, Near Sama Sports Complex Vadodara – 390024 Gujarat
11.	School Gardening — A Science Learning Tools for Sustainable Development	Rajib Ranjan Dhar	Rabindra Vidyapith ME School, Triangular Colony, Pandu Guwahati – 781012 Assam
12.	Finding out Square of any Number Arithmetically	Tapash Kumar Sarkar, <i>Assistant Teacher</i>	St. Joseph's High School (Amalgan) Barpeta Road, Barpeta – 781315 Assam
13.	Implementation of Creativity and Problem Solving through Art Education	Shaheena Ali <i>TGT (Art Education)</i>	K.V. No.2, Imphal Langjing, G.C. (CRPF), P.O. – Langjing Imphal – 795113 West Manipur
14.	Innovative method of Teaching in Mathematics Classroom	Munindra Kumar Mazumdar <i>PGT Mathematics</i>	Maria's Public School Birkuchi, Narengi Guwahati – 781026 Assam
15.	Developing Observation Skill of Budding Scientists through Science Experiments and Activities	Chandiraleka Gurusamy, <i>PRT</i>	Government Primary School Kalitheerthal Kuppam Madagadipet (Post) Puducherry – 605107
16.	Vocabulary Development in Hindi Language— A Language Game	D.S.B. Subrahmanyeswari <i>School Assistant</i>	Jai Hind Secondary School (Aided) Inagudurupeta Machilipatnam – 521001 Andhra Pradesh
17.	Let's be Cyber Smart: Cyber Security Awareness and Education among Students	Mujib Rahiman <i>K U Librarian</i>	Kendriya Vidyalaya Kanjikode West Palakkad – 678623 Kerala

18.	Effectiveness of Six Thinking Hats Technique in Teaching History among the High School Students in Puducherry: An Experimental Study	P. Vanthy <i>TGT</i>	Kavingareru Vanidasanar Government High School Seliamedu Puducherry – 607402
19.	Development of ‘Seven Seventy’ Strategy for Learning of English	Shaik Habeeb Ali <i>PGT English</i>	Knowledge Park International School Nizamabad – 503186 Telangana
20.	Poorna Sankhya, Knowing Integers	Mini Sekhar S. <i>TGT</i>	Kendriya Vidyalaya No.1 Hemambika Nagar Palakkad – 678009 Kerala
21.	Re-Building the green Earth	Rajesh Kumar.G.C. <i>TGT, Science</i>	Kendriya Vidyalaya-Sap Peroorkada Thiruvananthapuram Kerala – 695005
22.	The Use of ICT in ELT	S. Satyam <i>School Assistant (English)</i>	ZPHS Mondrai, Mandal Sangam, Warangal Rural Distt. – 506331 Telangana
23.	Learning Science through Stop Motion Animation	R. Anita <i>TGT</i>	Government High School Mettupalayam Puducherry – 605009
24.	Evolve Strategies for Inculcation of Peace and other Human Values in the School Children	Ajay Kumar Barad <i>Assistant Teacher</i>	Bajpur Nodal high School P.O.– Bajpur, Distt. Khordha – 752060 Odisha
25.	Impact of Microscopic Study and Experiment based Video on the Learning Process of Life Science in Class VII and IX	Tushar Kanti Nath <i>Assistant Teacher</i>	Fatepur High School P.O.– Fatepur VIA- Subaranapur Haringhata District Nadia – 741249 West Bengal
26.	Combating Dyslexia through Suitable Learning Strategies	Alok Rana <i>Teacher Educator</i>	Government Elementary Teacher Education Institution, Fakirpur At/P.O. – Fakirpur Keonjhar – 758022 Odisha
27.	Effects of Puppetry based learning activities on achievement of the learners in Social Studies	Santosh Kumar Parida <i>Senior Teacher Educator</i>	District Institute of Education and Training Nayagarh Raisunakhala – 752065 Odisha
28.	Innovative Teaching Practice in Mathematics of Class VI	Namita Mohapatra <i>Assistant Teacher</i>	UGUP School Aerodrome Colony Lane-2 Aerodrome Area Bhubaneswar – 751020 Odisha

Details of NCERT Committees, as mentioned in the MoA, for the Year 2020–21

- ❑ General Council
- ❑ Executive Committee
- ❑ Finance Committee
- ❑ Programme Advisory Committee
- ❑ Academic Committee of the National Institute of Education



GENERAL COUNCIL

- | | |
|---|--|
| (i) The Minister of Education
President (<i>ex-officio</i>) | 1. Ramesh Pokhriyal 'Nishank'
Hon'ble Education Minister
Ministry of Education
Shastri Bhawan
New Delhi-110001 |
| (ii) Chairman of the University
Grants Commission
(<i>ex-officio</i>) | 2. D.P. Singh
<i>Chairman</i>
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi-110002 |
| (iii) Secretary to the Ministry of
Education (Department of
School Education)
(<i>ex-officio</i>) | 3. Anita Karwal
<i>Secretary</i>
Department of School Education
and Literacy
Ministry of Education
Government of India
Shastri Bhawan
New Delhi-110001 |
| (iv) Four Vice Chancellors of
Universities, one from each
region, nominated by the
Government of India | 4. Sikander Kumar
<i>Vice Chancellor</i>
Himachal Pradesh University
Gyan Path, Summer Hill,
District Shimla-171005
Himachal Pradesh |
| | 5. Rajneesh Kumar Shukla
<i>Vice Chancellor</i>
Mahatma Gandhi Antarrashtriya
Hindi Vishwavidyalaya, Wardha
Gandhi Hills, P.O. Hindi University,
Wardha-442001
Maharashtra |
| | 6. H.C.S. Rathore
<i>Vice Chancellor</i>
Central University of South Bihar
BIT Campus, P.O.-B.V. College
Patna-800014
Bihar |



7. Gurmeet Singh
Vice Chancellor
 Pondicherry University
 Bharat Ratna Dr. B.R. Ambedkar
 Administrative Building
 R.V. Nagar, Kalapet
 Puducherry-605014
- (v) One representative of each State Government and Union Territory with a legislature who shall be the Education Minister of the State or Union Territory (or their representative) and in case of Delhi— the Chief Executive Councillor, Delhi (or their representative)
8. Hon'ble Minister for School Education
 Government of Andhra Pradesh
 A.P. Secretariat Building
 Hyderabad-500022
9. Hon'ble Minister for School Education
 Government of Arunachal Pradesh
 Itanagar-791111
10. Hon'ble Minister for School Education
 Government of Assam
 Janata Bhawan, Dispur-781006
 Assam
11. Hon'ble Minister for School Education
 Government of Bihar
 New Secretariat Building
 Patna-800015
 Bihar
12. Hon'ble Minister for School Education
 Government of Chhattisgarh
 Raipur-492007
 Chhattisgarh
13. Hon'ble Minister for School Education
 Government of Goa
 Goa Secretariat
 Panaji-403001
 Goa
14. Hon'ble Minister for School Education
 Government of Gujarat
 Block No. 1, Sachivalaya
 Gandhinagar-382010
 Gujarat



15. Hon'ble Minister for School Education
Government of Haryana
Haryana Civil Secretariat
Chandigarh-160001
16. Hon'ble Minister for School Education
Government of Himachal Pradesh
Shimla-171002
17. Hon'ble Minister for School Education
Government of Jharkhand
Ranchi-834004
Jharkhand
18. Hon'ble Minister for School Education
Government of Jammu and Kashmir
Srinagar-180001
19. Hon'ble Minister for School Education
Government of Karnataka
Vidhana Sudha
Bengaluru-560001
20. Hon'ble Minister for School Education
Government of Kerala
Ashoka Nanthancode
Thiruvananthapuram-695001
Kerala
21. Advisor to the Hon'ble Lieutenant
Governor (School Education)
Government of Ladakh
22. Hon'ble Minister for School Education
Government of Madhya Pradesh
Bhopal-462001
Madhya Pradesh
23. Hon'ble Minister for School Education
Government of Maharashtra
Mantralya Main Building
Mumbai-400032
Maharashtra
24. Hon'ble Minister for School Education
Government of Manipur
Manipur Secretariat
Imphal-795001
Manipur



25. Hon'ble Minister for School Education
Government of Meghalaya
Meghalaya Secretariat
Shillong-793001
Meghalaya
26. Hon'ble Minister for School Education
Government of Mizoram
Aizawl-796001
Mizoram
27. Hon'ble Minister for School Education
Government of Nagaland
Kohima-797001
Nagaland
28. Hon'ble Minister for School Education
Government of Odisha
Odisha Secretariat
Bhubaneswar-751001
Odisha
29. Hon'ble Minister for School Education
Government of Punjab
Chandigarh-160017
30. Hon'ble Minister for School Education
Government of Rajasthan
Government Secretariat
Jaipur-302001
Rajasthan
31. Hon'ble Minister for School Education
Government of Sikkim
Sikkim Secretariat, Tashiling
Gangtok-737101
Sikkim
32. Hon'ble Minister for School Education
Government of Tamil Nadu
Fort St. George
Chennai-600009
Tamil Nadu
33. Hon'ble Minister for School Education
Government of Telangana
Telangana Secretariat
Hyderabad-500022
Telangana



34. Hon'ble Minister for School Education
Government of Tripura
Civil Secretariat
Agartala-799001
Tripura
35. Hon'ble Minister for School Education
Government of Uttar Pradesh
Lucknow-226001
Uttar Pradesh
36. Hon'ble Minister for School Education
Government of Uttarakhand
Dehradun-248008
Uttarakhand
37. Hon'ble Minister for School Education
Government of West Bengal
Vikas Bhawan
Salt Lake
Kolkata-700001
West Bengal
38. Hon'ble Minister for School Education
Government of Puducherry
Chief Secretariat
Victor Simonel Street
Puducherry-605001
39. Hon'ble Minister for School Education
Government of National Capital
Territory of Delhi
Delhi Secretariat, I.P. Estate
New Delhi-110002
- (vi) All members of the
Executive Committee not
included above
40. Sanjay Dhotre
Hon'ble Minister of State for Education
Ministry of Education
Shastri Bhawan
New Delhi-110001
41. (i) Sridhar Srivastava
I/c Director
NCERT, New Delhi-110016
(w.e.f. 15.11.2020 A/N)
- (ii) Hrushikesh Senapaty
Director
NCERT, New Delhi
(up to 15.11.2020 F/N)



42. J.S. Rajput
Former *Director*, NCERT
A-16, Sector P-7, Mitra Enclave
Opp. Greater Valley School
Greater Noida-201308
Uttar Pradesh
43. Chand Kiran Saluja
Academic Director
Sanskrit Promotion Foundation
11204/5 Mandir Marg
Gaushala Marg
Doriwalan, New Delhi-110006
44. Krishna Mohan Tripathi
Member, NEP Draft Committee
Ex-Director, School Education
C-448 Panki
Kanpur-208020
Uttar Pradesh
Nomination under process
45. B.R. Kukreti
Ex-Dean and Head
Mahatma Jyotiba Phule Rohilkhand
University
C-46/47, Neelkanth
Suresh Sharma Nagar
Bareilly-243006
Uttar Pradesh
46. Kaustubh Chandra Joshi
Principal
S.K.S.G.I.C, Pattharkhani
P.O.-Biloi, Block-Munakot
Distt. Pithoragarh-262520
Uttarakhand
47. B. Usharani
Principal
Shri Ram Dayal Khemka
Vivekanand Vidyalaya
No. 9 Ellaiamman Koil Street
Tiruvottiyur, Chennai-19
Tamil Nadu



48. Shankar Sharan
Department of Education in
Social Sciences
NCERT
New Delhi-110016
49. Pramod Dubey
Department of Education in
Languages
NCERT
New Delhi-110016
50. Indrani Bhaduri
Educational Survey Division
NCERT
New Delhi-110016
51. Lamchonghoi Sweety Changsan
Joint Secretary (Institutions)
Ministry of Education
(Department of School Education and
Literacy)
Shastri Bhawan
New Delhi-110001
52. Darshana M. Dabral
JS and Financial Adviser
Ministry of Education
(Department of School Education
and Literacy)
Shastri Bhawan
New Delhi-110001
- (vii) (a) Chairman
Central Board of
Secondary Education
Delhi (*ex-officio*)
- (b) Commissioner
Kendriya Vidyalaya
Sangathan
New Delhi
(*ex-officio*)
53. *Chairman*
Central Board of Secondary
Education
Shiksha Sadan 17
Rouse Avenue, Institutional Area
Near Bal Bhawan
New Delhi-110001
54. *Commissioner*
Kendriya Vidyalaya Sangathan
18, Institutional Area
Shahid Jeet Singh Marg
New Delhi-110016



- (c) Director
Central Health Education
Bureau
New Delhi
(*ex-officio*)
- (d) Deputy Director General
In charge of Agricultural
Education
ICAR, Ministry of
Agriculture
New Delhi
(*ex-officio*)
- (e) Director of Training
Directorate General of
Training and
Employment,
Ministry of Labour
New Delhi
(*ex-officio*)
- (f) Representative of
Education Division
Planning Commission
New Delhi
(*ex-officio*)
- (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
55. Director
Central Health Education Bureau
(DGHS)
Ministry of Health and Family Welfare
Kotla Road
New Delhi-110002
56. Deputy Director General
In charge of Agriculture Education
ICAR, Krishi Anusandhan Bhawan
Pusa
New Delhi-110012
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
58. Adviser Education
Niti Aayog
Yojana Bhawan
New Delhi-110001
59. Kuldip Chand Agnihotri
Vice Chancellor
Central University of Himachal
Pradesh
Dharamshala, Camp Office near
H.P.C.A. Cricket Stadium
Distt. Kangra-176215
Himachal Pradesh
60. Manimekalai Mohan
Managing Trustee
Shri Saraswati Vidya Mandir Group
of School
Sf No.72/2 Vaigai Nagar
Pattanam, Singanallur to Vellore
Road
Coimbatore-641016
Tamil Nadu



Special Invitee

Convener

61. Jaya Bhardwaj
Principal
Hansraj Public School
Sector-6, Panchkula-134109
Haryana
62. Anita Sharma
Principal
Sanatan Dharam Public School
BU Block, Pitampura
Delhi-110034
63. Dinto K.P.
Principal
Vidhyadhiraja Vidyapeetom Central
School
Mavelikkara, Alapuzha-690101
Kerala
64. Shailendra Singh Bhandari
Principal
Rishikesh Public School
Rishikesh-249201
Uttarakhand
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

- | | |
|--|---|
| (i) President of the Council who shall be the <i>ex-officio</i> President of the Executive Committee | 1. Ramesh Pokhriyal 'Nishank'
Hon'ble Education Minister
Ministry of Education
Shastri Bhawan
New Delhi-110001 |
| (ii) (a) Minister of State in the Ministry of Education who shall be the <i>ex-officio</i> Vice President of the Executive Committee | 2. Sanjay Dhotre
Hon'ble Minister of State for Education
Ministry of Education
Shastri Bhawan
New Delhi-110001 |
| (b) A Deputy Minister of Education nominated by the President of the Council | 3. _____ |
| (c) Director of the Council | 4. (i) Sridhar Srivastava
<i>I/c Director</i>
NCERT, New Delhi-110016
(w.e.f. 15.11.2020 A/N)

(ii) Hrushikesh Senapaty
<i>Director</i>
NCERT, New Delhi
(up to 15.11.2020 F/N) |
| (d) Secretary, Ministry of Education <i>ex-officio</i> | 5. Anita Karwal
<i>Secretary</i>
Department of School Education and Literacy
Ministry of Education
Government of India
Shastri Bhawan
New Delhi-110001 |
| (iii) Chairman of the University Grants Commission- Member <i>ex-officio</i> | 6. D.P. Singh
<i>Chairman</i>
University Grants Commission
Bahadur Shah Zafar Marg
New Delhi-110002 |
| (iv) Six Educationists with known interest in school education (two of whom shall be school teachers) Nominated by the President | 7. J.S. Rajput
<i>Former Director, NCERT</i>
A-16, Sector P-7, Mitra Enclave
Opp. Greater Valley School
Greater Noida-201308
Uttar Pradesh |



8. Chand Kiran Saluja
Academic Director
Sanskrit Promotion Foundation
11204/5 Mandir Marg
Gaushala Marg
Doriwalan,
New Delhi-110006
9. Krishna Mohan Tripathi
Member, NEP Draft Committee
Ex-Director, School Education
C-448 Panki
Kanpur-208020
Uttar Pradesh
10. B.R. Kukreti
Ex Dean and Head
Mahatma Jyotiba Phule
Rohilkhand University
Neelkanth, C-46/47
Suresh Sharma Nagar
Bareilly-243006
Uttar Pradesh
11. Kaustubh Chandra Joshi
Principal
S.K.S.G.I.C., Pattharkhani
P.O.-Biloi, Block-Munakot
Distt. Pithoragarh-262520
Uttarakhand
12. B. Usharani
Principal
Ram Dayal Khemka Vivekanand
Vidyalaya
No. 9 Ellaiamman Koil Street
Tiruvottiyur, Chennai-19
Tamil Nadu
- (v) Joint Director of the Council
13. Sridhar Srivastava
Joint Director
NCERT
New Delhi-110016



- | | |
|---|--|
| <p>(vi) Three members of the faculty of the Council, of whom at least two shall be at the level of Professors and Heads of the Departments, nominated by the President of the Council</p> | <p>14. Shankar Sharan
Department of Education in Social Sciences
NCERT
New Delhi</p> |
| | <p>15. Pramod Dubey
Department of Education in Languages
NCERT
New Delhi</p> |
| | <p>16. Indrani Bhaduri
Educational Survey Division
NCERT
New Delhi</p> |
| <p>(vii) One representative of the Ministry of Education; and</p> | <p>17. Lamchonghoi Sweety Changsan
<i>Joint Secretary</i> (Institutions)
Ministry of Education
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110001</p> |
| <p>(viii) One representative of the Ministry of Finance, who shall be the Financial Adviser of the Council</p> | <p>18. Darshana M. Dabral
<i>JS and Financial Adviser</i>
Ministry of Education
(Department of School Education and Literacy)
Shastri Bhawan
New Delhi-110001</p> |
| <p>29. Secretary of the Council shall be the Secretary of the Executive Committee</p> | <p>19. Harsh Kumar
<i>Secretary</i>
NCERT
New Delhi-110016</p> |



FINANCE COMMITTEE (UP TO JUNE 2020)

(i) The Director of NCERT (<i>ex-officio</i>)	Chairperson	(i) Sridhar Srivastava <i>I/c Director</i> NCERT, New Delhi-110016 (w.e.f. 15.11.2020 A/N)
		(ii) Hrushikesh Senapaty <i>Director</i> NCERT, New Delhi (up to 15.11.2020 F/N)
(ii) Financial Advisor MHRD (<i>ex-officio</i>)	Member	Darshana M. Dabral <i>JS and Financial Advisor</i> Ministry of Education (Department of School Education and Literacy) Shastri Bhawan New Delhi-110001
	Member	Lamchonghoi Sweety Changsan <i>Joint Secretary (Institutions)</i> Ministry of Education (Department of School Education and Literacy) Shastri Bhawan New Delhi-110001
	Member	Amit Cowshish <i>Additional Secretary (Retd.)</i> Ministry of Defence 578, Sector 'A' Pocket 'C' Vasant Kunj New Delhi-110070
	Member	Rakesh Mohan Joshi <i>Professor and Chairperson</i> Indian Institute of Foreign Trade B-21, Qutab Institutional Area New Delhi
(iii) Secretary, NCERT	Member Convenor	Harsh Kumar <i>Secretary</i> NCERT New Delhi-110 016



PROGRAMME ADVISORY COMMITTEE (UP TO DECEMBER 2020)

- | | |
|----------------------------|------------------|
| (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 Damodar Thackersey
Women's University, (SNDTU), Mumbai, Maharashtra | Member |
| (v) H.C. Verma
Professor of Physics (Retd.)
IIT-Kanpur, Uttar Pradesh | Member |

Five Directors of SIEs and SCERTs Nominated by the President, NCERT as Members

- | | |
|---|--------|
| (i) Director
State Council of Educational Research and Training
(SCERT), Uttar Pradesh | Member |
| (ii) Director
State Council of Educational Research and Training
(SCERT), Uttarakhand | Member |
| (iii) Director
State Council of Educational Research and Training
(SCERT), Madhya Pradesh | Member |
| (iv) Director
State Council of Educational Research and Training
(SCERT), Haryana | Member |



- (v) Director
State Council of Educational Research and Training
(SCERT), Andhra Pradesh Member

Members from the NCERT

- (i) A.P. Behera
Joint Director
CIET
NCERT, New Delhi Member
- (ii) Rajendra Pal
CIET
NCERT, New Delhi Member
- (iii) Rajesh P. Khambayat
Joint Director
PSSCIVE
Shyamla Hills
Bhopal – 462013
Madhya Pradesh Member
- (iv) Mridula Saxena
Professor
PSSCIVE
Shyamla Hills
Bhopal – 462013
Madhya Pradesh Member
- (v) S.V. Sharma
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) Nityananda Pradhan
Principal
Regional Institute of Education
Shyamla Hills
Bhopal – 462013
Madhya Pradesh Member



(viii)	Dean of Instructions Regional Institute of Education Shyamla Hills Bhopal-462013	Member
(ix)	P.C. Agarwal <i>Principal</i> Regional Institute of Education Sachivalaya Marg Bhubaneswar-751007 Odisha	Member
(x)	Dean of Instructions Regional Institute of Education Sachivalaya Marg Bhubaneswar-751007 Odisha	Member
(xi)	Y. Sreekanth <i>Principal</i> Regional Institute of Education Manas Gangotri Mysuru-57006 Karnataka	Member
(xii)	Dean of Instruction Regional Institute of Education Manas Gangotri Mysuru-57006 Karnataka	Member
(xiii)	Bidyadhar Barthakur <i>Principal</i> North East Regional Institute of Education Umiam (Ri-Bhoi), Barapani Meghalaya	Member
(xiv)	Dean of Instructions North East Regional Institute of Education Umiam (Ri-Bhoi), Barapani Meghalaya	Member
(xv)	Suniti Sanwal <i>Head</i> Department of Elementary Education (DEE) NCERT, New Delhi	Member



- | | | |
|---------|--|--------|
| (xvi) | A.K. Rajput
Department of Elementary Education (DEE)
NCERT, New Delhi | Member |
| (xvii) | Sandhya Singh
<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) | S.C. Chauhan
<i>Head</i>
Department of Education of Groups with Special
Needs (DEGSN)
NCERT, New Delhi | Member |
| (xx) | Anita Julka
Department of Education of Groups with Special
Needs (DEGSN)
NCERT, New Delhi | Member |
| (xxi) | Mona Yadav
<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) | Gauri Srivastava
<i>Head</i>
Department of Education in Social Sciences (DESS)
NCERT, New Delhi | Member |
| (xxiv) | Neeraja Rashmi
Department of Education in Social Sciences (DESS)
NCERT, New Delhi | Member |



(xxv)	Sunita Farkya <i>Head</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
(xxvi)	Dinesh Kumar <i>Professor</i> Department of Education in Science and Mathematics (DESM) NCERT, New Delhi	Member
(xxvii)	Veerpal Singh <i>Head</i> Educational Survey Division (ESD) NCERT, New Delhi	Member
(xxviii)	Indrani Bhaduri <i>Professor</i> Educational Survey Division (ESD)	Member
(xxix)	Ranjana Arora <i>Head</i> Department of Teacher Education (DTE) NCERT, New Delhi	Member
(xxx)	B.P. Bhardwaj <i>Professor</i> Department of Teacher Education (DTE) NCERT, New Delhi	Member
(xxxi)	Prabhat Kr. Mishra <i>Head</i> Department of Educational Psychology and Foundations of Education (DEPFE) NCERT, New Delhi	Member
(xxxii)	Anjum Sibia <i>Professor</i> NCERT, New Delhi	Member
(xxxiii)	A.K. Srivastava <i>Head</i> Department of Educational Research (DER) NCERT, New Delhi	Member



(xxxiv)	Anupam Ahuja <i>Head</i> International Relations Division (IRD) NCERT, New Delhi	Member
(xxxv)	A.D. Tewari <i>I/c Chairperson</i> Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xxxvi)	M. Samantaray <i>Deputy Librarian</i> Library and Documentation Division (LDD) NCERT, New Delhi	Member
(xxxvii)	Ashita Raveendran <i>I/c Head</i> Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xxxviii)	Subhash P.D. <i>Associate Professor</i> Planning and Monitoring Division (PMD) NCERT, New Delhi	Member
(xxxix)	Anita Nuna <i>Head</i> Department of Curriculum Studies (DCS) NCERT, New Delhi	Member
(xl)	Sharad Kumar Pandey <i>Associate Professor</i> Department of Curriculum Studies (DCS) NCERT, New Delhi	Member
(xli)	Pawan Sudhir <i>Head</i> Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member
(xlii)	Jyotsna Tiwari <i>Professor</i> Department of Education in Arts and Aesthetics (DEAA) NCERT, New Delhi	Member



(xliii) Vijay Pal Singh <i>Head</i> Department of Educational Kits (DEK) NCERT, New Delhi	Member
(xliv) A.K. Wazalwar <i>Professor</i> Department of Educational Kits (DEK) NCERT, New Delhi	Member
(xlv) Anup Kumar Rajput <i>Head</i> Publication Division NCERT, New Delhi	Member

Special Invitees

- (i) Joint Secretary (Sch.-4)
Department of School Education and Literacy
MoE, Shastri 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



**ACADEMIC COMMITTEE OF
NATIONAL INSTITUTE OF EDUCATION**

(i) Chairperson

Anjum Sibia

Dean (Academic)

(ii) External Experts

(a) S.M. Sungoh

Department of Education, NEHU

Shillong-793022

Meghalaya

(b) Purnima Singh

Department of Humanities and

Social Science

IIT, Delhi, Hauz Khas

New Delhi-110016

(c) T.K. Venkatasubramanian

Professor (Retd.)

University of Delhi

T-150 EMAAR, Emerald Hills

Sector-65, Golf Course Extn. Road

Gurugram-122101

Haryana

(d) Sanjay Kumar Gupta

Professor

Children's University

Sector-20, Gandhinagar-382021

Gujarat

(e) Director

SCERT, Uttarakhand

Tapovan Road, RGNV Campus

Nanurkheda, Dehradun-248001

Uttarakhand

(iii) Joint Directors of CIET, NCERT, and PSSCIVE-Bhopal

(iv) Head of NIE Departments/Divisions/Cell

(a) Suniti Sanwal, *Head*, Department of Elementary Education (DEE)

(b) Sandhya Singh, *Head*, Department of Education in Languages (DEL)

(c) S.C. Chauhan, *Head*, Department of Education of Groups with Special Needs (DEGSN)

(d) Mona Yadav, *Head*, Department of Gender Studies (DGS)

(e) Gouri Srivastava, *Head*, Department of Education in Social Sciences (DESS)



- (f) Sunita Farkya, *Head*, Department of Education in Science and Mathematics (DESM)
- (g) Anita Nuna, *Head*, Department of Curriculum Studies (DCS)
- (h) Pawan Sudhir, *Head*, Department of Education in Arts and Aesthetics (DEAA)
- (i) V.P. Singh, *Head*, Department of Educational Kits (DEK)
- (j) Prabhat Kumar Mishra, *Head*, Department of Educational Psychology and Foundations of Education (DEPFE)
- (k) A.K. Srivastava, *Head*, Division of Educational Research (DER)
- (l) Ranjana Arora, *Head*, Department of Teacher Education (DTE)
- (m) Veerpal Singh, *Head*, Educational Survey Division (ESD)
- (n) Anupam Ahuja, *Head*, International Relations Division (IRD)
- (o) A.D. Tewari, *I/c Chairperson*, Library and Documentation Division (LDD)
- (p) Ashita Raveendran, *I/c Head*, Planning and Monitoring Division (PMD)
- (q) Ranjana Arora, *In charge*, Curriculum Group (CG)
- (r) Anup Kumar Rajput, *Head*, Publication Division (PD)

(v) Faculty from NIE, CIET and PSSCIVE

- (a) Usha Sharma, *Professor*, DEE
- (b) J.M. Mishra, *Professor*, DEL
- (c) Vinay Kumar Singh, *Professor*, DEGSN
- (d) Poonam Agrawal, *Professor*, DGS
- (e) Shipra Vaidya, *Professor*, DESS
- (f) Dinesh Kumar, *Professor*, DESM
- (g) Sharad Kr. Pandey, *Associate Professor*, DCS
- (h) Jyotsna Tiwari, *Professor*, DEAA
- (i) A.K. Wazalwar, *Professor*, DEK
- (j) Prabhat Kumar Mishra, *Professor*, DEPFE
- (k) B.P. Bhardwaj, *Professor*, DTE
- (l) Indrani Bhaduri, *Professor*, ESD
- (m) Satya Bhusan, *Assistant Professor*, IRD
- (n) M. Samantaray, *Deputy Librarian*, LDD
- (o) P.D. Subhash, *Associate Professor*, PMD
- (p) R.R. Koireng, *Associate Professor*, CG
- (q) Indu Kumar, *Professor*, CIET
- (r) V.S. Mehrotra, *Professor*, PSSCIVE, Bhopal





APPENDIX V

NCERT's Consolidated Sanctioned Strength of Posts as on 31 March 2021 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	304	52	17.11%	21	6.91%	32	10.53%	03	0.99%
B	685	386	75	19.43%	45	11.66%	60	15.54%	09	2.33%
C and D	1474	458	124	27.07%	61	13.32%	81	17.69%	10	2.18%
Total	2833	1148	251	21.86%	127	11.06%	173	15.07%	22	1.92%

Receipts and Payments Account for the Year ended on 31 March 2021

Receipts	Current Year 2020-21	Previous Year 2019-20	Payments	Current Year 2020-21	Previous Year 2019-20
1. Opening Balances			1. Expenses		
(a) Cash Balances			(a) Establishment Expenses	2,09,77,06,227	1,99,35,34,311
(b) Bank Balances			(b) Academic Expenses	1,63,55,86,693	2,82,59,97,130
(i) In Current Accounts	24,351	24,351	(c) Administrative Expenses	1,36,48,20,968	1,47,78,22,936
(ii) In Deposit Accounts	18,091	18,101	(d) Transportation Expenses	34,31,313	1,36,96,449
(iii) In Saving Accounts	1,20,43,14,525	48,63,68,628	(e) Repairs and Maintenance Expenses	36,89,41,669	39,01,58,592
2. Grants Received			(f) Prior Period Expenses	-	-
(a) From Government of India	3,88,42,00,000	2,76,05,00,000	2. Payments against Earmarked/Endowment Funds	-	-
(b) From State Government of India					
(c) From Other Sources (Amount reimbursed from UNFPA/AEP)	-	-	3. Payments against Sponsored Projects/Schemes	16,79,95,968	24,14,00,195



(b) Other Investments	10,79,84,719	10,08,34,408	80,25,91,663	78,67,74,711
8. Interest received on				
(a) Bank Deposits	33,26,01,002	35,88,82,328	-	-
(b) Loans and Advances	16,16,210	22,00,403		
(c) Savings Bank Accounts	3,10,73,735	3,35,66,523	2,49,05,943	72,54,266
(d) Bank Guarantees	-	-		
9. Investments encashed	-	-	6,32,00,40,005	7,32,64,05,651
10. Term Deposits with Scheduled Banks encashed	7,67,00,00,000	6,44,00,00,000		
11. Other Income (Including Prior Period income)	2,67,09,84,104	5,05,60,63,865	-	-
12. Deposits and Advances	93,92,874	2,60,83,580	24,351	24,351
13. Miscellaneous Receipts including Statutory Receipts	3,81,05,56,912	3,48,16,77,329	1,14,93,70,496	1,20,43,14,525
14. Any Other Receipts	3,30,16,22,341	4,86,72,64,704	18,075	18,091
Total	23,35,89,85,334	24,02,52,15,607	23,35,89,85,334	24,02,52,15,607

Sd/-

Chief Accounts Officer
NCERT, New Delhi-110 016

Sd/-

Secretary
NCERT, New Delhi-110 016



Annual Report 2020-2021

Separate Audit Report of the Comptroller and Auditor General of India on the Accounts of the National Council of Educational Research and Training (NCERT) for the year ended 31 March 2021

1. We have audited the attached Balance Sheet of the National Council of Educational Research and Training (NCERT) as at 31 March 2021, Income and Expenditure Account and Receipts and Payment Account for the year ended on that date under Section 20(1) of the Comptroller and Auditor General's (Duties, Powers and Conditions of Service) Act, 1971. The audit has been entrusted for the period up to 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 and Regulations (Propriety and Regularity) and efficiency-cum-performance aspects, etc., if any, are reported through Inspection Reports/CAG's Audit Reports separately.
3. We have conducted our audit in accordance with auditing standards generally accepted in India. These standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free from material misstatements. An audit includes examining, on a test basis, evidences supporting the amount and disclosure in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentation of financial statements. We believe that our audit provides a reasonable basis for our opinion.
4. Based on our audit, we report that:
 - (i) We have obtained all the information and explanations, subject to the 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 and Expenditure Account, and Receipts and Payments Account dealt with by this report have been broadly drawn up in the format prescribed by the Ministry of 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.
5. We further report that:



A. Balance Sheet**A.1 Assets****A.1.1 Fixed Assets (Schedule 4)— ₹166.65 crore**

The above does not include land and building owned by Regional Production and Distribution Centre (RPDC), Bengaluru (unit of NCERT). This is being pointed out since 2018-19.

NCERT replied that efforts are being made to trace out the original papers of land possessed by RPDC Bengaluru.

In the absence of any details of the land and building, the impact of the same on the accounts is not ascertainable and verifiable by audit.

B. Income and Expenditure Accounts**B.1 Expenditure****B.1.1 Other Expenses (Schedule 21)— Nil**

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 for 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.

NCERT replied that the process of writing off the said amount has been initiated.

C. GPF/CPF Accounts**C.1 Assets****C.1.1 Investment— ₹146.93 crore**

The above includes investment of ₹1.60 crore in bonds of Punjab Financial Corporation (PFC) which have matured on 1/12/2016. The amount has neither been received nor was any provision made for the same. This has resulted in overstatement of Investment and understatement of Expenditure by ₹1.60 crore. The issue has been pointed out in the last four years; however, no action has been taken in this regard. The matter was also not disclosed in Notes to Accounts.

C.1.2 Accrued Interest— ₹4.64 crore

The above includes accrued interest of ₹91.92 lakh for the period from December 2016 to March 2021 on investment of ₹1.60 crore made in PFC bonds. Although principal amount of the bond which matured on 01 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 Debts) by ₹91.92 lakh each. The issue has been pointed out in last four years; however, no action has been taken in this regard. The matter was also not disclosed in Notes to Accounts.

D. General**D.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



headquarters 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 headquarters. All the constituents units should prepare the complete set of accounts at the end of the financial year i.e., Receipts and Payments Account, Income and Expenditure Account and Balance Sheet from which the consolidated accounts should be prepared at NCERT headquarters for better reporting of the accounts of NCERT. This is being repeatedly pointed out since 2014–15 but no remedial action has been taken by NCERT except an assurance that compliance will be done next year.

D.2 Current Liabilities and Provision (Schedule 3)— ₹2195.71 crore

- (i) The above includes minus figures of sundry creditors of ₹19.40 lakh. As per Format of Accounts prescribed by Ministry of Education, these balances should be shown under Current Assets. It has resulted in understatement of Current Liabilities and Provisions and Current Assets by ₹19.40 lakh. This is being pointed out since 2017–18. Due to no action taken by NCERT in the matter, audit is not able to verify the correctness of the amount.
- (ii) Statutory Liabilities includes minus balances of ₹79.41 lakh under the head Opening Balance. As per the Format of Accounts prescribed by the Ministry of Education, these balances should be shown under Current Assets. It has resulted in understatement of Current Liabilities and Provisions and Current Assets by ₹79.41 lakh. This is being pointed out since 2018–19. Due to no action taken by NCERT in the matter, audit is not able to verify the correctness of the amount.

D.3 Details/record for Capital Advances of ₹1.70 crore in respect of NCERT headquarters deposited with CPWD were not furnished to audit. The same was also not made available during the audit of accounts for the year 2019–20. NCERT stated that efforts are being made to reconcile the differential figures which pertains to 2014–15.

D.4 The Loans and Advances includes debit balances in sponsored projects amounting to ₹6.38 crore, whereas as per the details of sponsored projects placed in the accounts, the amount was ₹5.75 crore. The difference of ₹63.47 lakh which pertains to 2015–16 needs to be reconciled.

Similarly, Loans and Advances includes deposit with DAVP of ₹11.42 lakh in respect of Regional Institute of Educational, Bhopal. The same amount has been shown deposited since 2008 but no details are available with the Institute. This was pointed out in 2019–20 report, however no action has been taken by the Council.

E. Grant-in-aid

During 2020–21, NCERT received grant-in-aid of ₹388.42 crore (Capital: ₹35.00 crore and Revenue: ₹353.42 crore) out of which grant of ₹97.10 crore (Capital: ₹8.75 and Revenue: ₹88.35 crore) was received in the month of March 2021. It had an opening balance of ₹6.69 crore (Capital: Nil and Revenue: ₹6.69 crore) as on 1 April 2020. It has its own receipt ₹0.04 crore (Capital: ₹0.04 crore and Revenue: Nil). Out of total available



grant of ₹395.15 crore, it utilised ₹352.04 crore (Capital: ₹35.04 crore and Revenue: ₹317.00 crore) leaving an unspent balance of ₹43.11 crore (Capital: Nil and Revenue: ₹43.11 crore) as on 31st March 2021.

It also received grant of ₹26.79 crore for sponsored/specific projects from Ministry of Education and other agencies during the year and had an opening balance of ₹17.95 crore in these projects. Out of the total grant, the grant of ₹19.18 crore was received in the month of March 2021. Out of the total grant of ₹44.74 crore, an expenditure of ₹16.80 crore was incurred by the Council during the year on these projects leaving a balance of ₹27.94 crore as on 31st March 2021.

F. Management Letter

Deficiencies which have not been included in the Audit Report have been brought to the notice of the Director, NCERT, through a Management Letter issued separately for remedial/corrective action.

- (i) Subject to our observations in the preceding paragraphs, we report that the Balance Sheet, Income and Expenditure Account and Receipts and Payments Account dealt with by this report are in agreement with the books of accounts.
- (ii) In our opinion and to the best of our information and according to the explanations given to us, the said financial statements read together with the Accounting Policies and Notes on Accounts, and subject to the significant matters stated above and other matters mentioned in Annexure to this Audit Report, give a true and fair view in conformity with accounting principles generally accepted in India.
 - (a) in so far as it relates to the Balance Sheet, of the state of affairs of the National Council for Educational Research and Training, Delhi as at 31 March 2021; and
 - (b) and in so far as it relates to Income and Expenditure Account of the surplus for the year ended on that date.

For and on behalf of the C&AG of India

Place: New Delhi

Date:

**Director General of Audit
(Home, Education and 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 2020–21 but no unit was audited.
- Internal audit of NCERT HQ has not been conducted till date.
- Proper follow up action was not taken to get the objections settled as 388 internal audit paras were outstanding as on 31.03.2021.

2. Adequacy of internal control system

The Internal control system of NCERT is not adequate as:

- Non settlement of LTC advances of ` 1.02 lakh within the prescribed time.
- No activity in some sponsored projects for the last three years.
- Non settlement of Medical advance of ` 2.07 lakh even after the retirement of employee in April 2021.
- Huge unreconciled amounts in the Bank Reconciliation Statement of the NCERT Hqrs.

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.) including Library Books has been conducted up to 2016–17.
- The Physical Verification of Fixed Assets of CIET was conducted up to August 2020 and of Library Books up to March 2021. Information in respect of the Physical verification of the remaining 11 units of NCERT has not been furnished.

4. System of physical verification of inventory

- The physical verification of stationery and non-consumables of NCERT (Hqrs.) have been conducted up to August 2021.
- The physical verification of NCERT (Publications) has been done up to September 2020.

5. Regularity in payment of statutory dues

As per accounts, no payment over six months in respect of statutory dues was outstanding on 31.03.2021.



Publications released during the Year 2020–21

TEXTBOOKS

Class I

- *Ganit Ka Jadu I*
- *Marigold I*
- *Math-Magic 1*
- *Rimjhim 1*

Class II

- *Ganit Ka Jadu 2*
- *Marigold II*
- *Math-Magic 2*
- *Rimjhim 2*

Class III

- *Aas-Pass (EVS)*
- *Ganit Ka Jadu 3*
- *Looking Around I (EVS)*
- *Marigold III*
- *Math-Magic 3*
- *Rimjhim 3*

Class IV

- *Aas-Pass (EVS)*
- *Ganit Ka Jadu 4*
- *Looking Around (EVS)*
- *Marigold IV*
- *Math-Magic 4*
- *Rimjhim 4*

Class V

- *Aas-Pass (EVS)*
- *Ganit Ka Jadu 5*
- *Looking Around (EVS)*
- *Marigold V*
- *Math-Magic 5*
- *Rimjhim 5*

Class VI

- *A Pact with the Sun (English Supplementary Reader)*

- *Bal Ram Katha (Hindi Supplementary Reader)*
- *Doorva I*
- *Ganit*
- *Hamare Ateet 1*
- *Honeysuckle (English Reader)*
- *Mathematics*
- *Our Pasts I*
- *Prithvi: Hamara Aavas*
- *Ruchira Bhag I*
- *Samajik evam Rajnitik Jeevan*
- *Science*
- *Social and Political Life*
- *The Earth: Our Habitat*
- *Vasant 1*
- *Vigyan*

Class VII

- *An Alien Hand (English Supplementary Reader)*
- *Bal Mahabharat Katha (Hindi Supplementary Reader)*
- *Doorva 2 (Dwitiya Bhasha)*
- *Ganit*
- *Hamara Paryavaran*
- *Hamare Ateet 2*
- *Honeycomb (English Textbook)*
- *Mathematics*
- *Our Environment*
- *Our Pasts II*
- *Ruchira Bhag 2*
- *Samajik Evam Rajnitik Jeevan 2*
- *Science*
- *Social and Political Life II*
- *Vasant 2*
- *Vigyan*

Class VIII

- *Bharat Ki Khoj (Hindi Supplementary Reader)*



- Doorva 3
- Ganit
- Hamare Ateet 3
- Honeydew
- It so Happened (English Supplementary Reader)
- Mathematics
- Our Pasts III
- Resources and Development
- Ruchira 3
- Samajik evam Rajnitik Jeevan 3
- Sansadhan Aur Vikas
- Science
- Social and Political Life III
- Vasant 3
- Vigyan

Class IX

- Arthashastra
- Beehive (English Textbook, Elective Course)
- Bharat aur Samkaleen Vishwa I
- Contemporary India I
- Democratic Politics
- Economics
- Ganit
- India and the Contemporary World I
- Information and Communication Technology for Class IX
- Kritika Bhag-1 (Hindi Core Course)
- Kshitij Bhag-1 (Hindi Core Course)
- Loktantrik Rajniti
- Mathematics
- Moments (English Supplementary Reader)
- Samkaleen Bharat I
- Sanchayan Bhag-1 (Hindi Elective Course)
- Science

- Shemushi Bhag-1
- Sparsh Bhag-1 (Hindi Elective Course)
- Vigyan
- Words and Expressions 1 (Workbook in English for Class IX)

Class X

- Arthik Vikas ki Samajh
- Bharat aur Samkaleen Vishwa II
- Contemporary India II
- Democratic Politics II
- First Flight (English Textbook, Elective Course)
- Footprints without Feet (English Supplementary Reader Elective Course)
- Ganit
- Health and Physical Education Class X
- India and the Contemporary World II
- Kritika Bhag-2 (Hindi Core Course)
- Kshitij Bhag-2 (Hindi Core Course)
- Loktantrik Rajniti II
- Mathematics
- Samkaleen Bharat II
- Sanchayan Bhag-2 (Hindi Elective Course)
- Science
- Shemushi Bhag-2
- Sparsh Bhag-2 (Hindi Elective Course)
- Understanding Economic Development
- Vigyan
- Words and Expressions, Class X

Class XI

- Aaroh Bhag-1 (Hindi Core Course)



- *Abhivyaakti Aur Madhyam*
- *Accountancy Part-I*
- *Accountancy Part-II*
- *An Introduction to Indian Art*
- *Antra Bhag-1 (Hindi Elective Course)*
- *Antral Bhag-1 (Hindi Elective Course)*
- *Arthashastra Mein Sankhyiki*
- *Bharat: Bhautik Paryavaran*
- *Bharatiya Hastakala Ki Paramparayen*
- *Bharatiya Hastakala Paramparaon ki Khoj*
- *Bharat Ka Samvidhan: Siddhant Aur Vyavhar*
- *Bhartiya Arthvyavastha Ka Vikas*
- *Bhashwati Bhag-1*
- *Bhautik Bhugol Ke Mool Siddhant*
- *Bhautiki Bhag-1*
- *Bhautiki Bhag-2*
- *Bhugol Mein Prayogatmak Karya Bhag-1*
- *Biology*
- *Biotechnology, Class XI*
- *Business Studies*
- *Chemistry Part-I*
- *Chemistry Part-II*
- *Computer and Communication Technology – Part II*
- *Computer Aur Sanchar Pradyogiki Bhag I*
- *Computer Aur Sanchar Pradyogiki Bhag – II*
- *Computer and Communication Technology – Part I*
- *Computer Science, Class XI*
- *Exploring the Craft Tradition in India*
- *Fundamentals of Physical Geography*
- *Ganit*
- *Graphic Design Ek kahani*
- *Health and Physical Education, Class XI*
- *Human Ecology and Family Sciences Part – I*
- *Human Ecology and Family Sciences Part – II*
- *India: Physical Environment*
- *Indian Constitution at Work*
- *Indian Economic Development*
- *Informatics Practices, Class XI*
- *Introducing Sociology*
- *Jeev Vigyan*
- *Lekhashastra Bhag-2*
- *Lekhashastra Bhag-I*
- *Living Craft Traditions of India (Textbook in Heritage Crafts)*
- *Manav Paristhiti ki evam Pariwar Vigyan Bhag – I*
- *Manovigyan Ka Parichay*
- *Mathematics*
- *Physics Part-I*
- *Physics Part-II*
- *Political Theory II*
- *Practical Work in Geography Part-I*
- *Psychology*
- *Rajniti Siddhant 2*
- *Rasayan Vigyan Bhag-1*
- *Rasayan Vigyan Bhag-2*
- *Samaj Ka Bodh*
- *Samajshastra ka Parichay*
- *Shashwati Bhag-1*
- *Srijan – I (Textbook in creative writing and translation)*
- *Statistics to Economics*
- *Themes of World History*
- *The Story of Graphic Design*
- *Understanding Society*
- *Vishwa Itihas Ke Kuch Vishay*
- *Vitaan Bhag-1 (Hindi Core Course)*
- *Vyavsayik Adhyayan*
- *Woven Words (English Elective Course)*



Class XII

- Aaroh Bhag-2 (Hindi Core Course)
- Accountancy I: Not-for-Profit Organisation and Partnership Accounts
- Accountancy II: Company Accounts and Analysis of Financial Statements
- Accountancy – Computerised Accounting System
- An Introduction to Indian Art-II, Class XII
- Antra Bhag-2 (Hindi Elective Course)
- Antral Bhag-2 (Hindi Elective Course)
- Bharatiya Itihas Ke Kuch Vishay Bhag-1
- Bharatiya Itihas Ke Kuch Vishay Bhag-2
- Bharatiya Itihas Ke Kuch Vishay Bhag-3
- Bharat Mein Samajik Parivartan Aur Vikas
- Bhartiya Samaj
- Bhashwati Bhag-2
- Bhautiki Bhag-1
- Bhautiki Bhag-2
- Bhugol Mein Prayogatmak Karya Bhag-2
- Biology
- Business Studies Part-I
- Business Studies Part-II
- Chemistry Part-I
- Chemistry Part-II
- Computer Science, Class XII
- Contemporary World Politics
- Craft Tradition of India Textbook in Heritage Craft
- Flamingo (English Core Course)
- Fundamentals of Physical Geography
- Ganit Bhag-I
- Ganit Bhag-II
- Graphic Design
- Human Ecology and Family Sciences Part – I
- Human Ecology and Family Sciences Part – II
- Indian Society
- Informatics Practices, Class XII
- Introductory Macroeconomics
- Introductory Microeconomics
- Jeev Vigyan
- Kaleidoscope (English Elective Course)
- Lekhashastra 1: Alabhkari Sansthayen Evam Sanjhedari Khatey
- Lekhashastra 2: Company Khate Evam Vittiya Vivranon Ka Vishleshan
- Manav Bhugol Ke Mool Siddhant
- Manav Paristhiti evam Parivar Vigyan, Bhag-2, Class XII
- Manav Paristhitiki evam Parivar Vigyan Bhag – I
- Manovigyan Ka Prichay
- Mathematics Part-I
- Mathematics Part-II
- Physics Part-I
- Physics Part-II
- Politics in India since Independence
- Practical Work in Geography Part-II
- Psychology
- Rasayan Vigyan Bhag-1
- Rasayan Vigyan Bhag-2
- Samashti Arthashastra: Ek Parichay
- Samkaleen Vishwa Rajniti
- Shashwati Bhag-2
- Social Change and Development in India
- Srijan – 2 Textbook in creative writing and translation



- *Sukshma Rasayan Prayogshala Kit Niradeshika Class XI aur XII*
- *Swatantra Bharat Mein Rajniti*
- *Themes in Indian History Part-I*
- *Themes in Indian History Part-II*
- *Themes in Indian History Part-III*
- *Towards a New Age of Graphic Design*
- *Vistas (English Core Course)*
- *Vitaan Bhag-2 (Hindi Core Course)*
- *Vyashti Arthashastra: Ek Parichay*
- *Vyavasayik Adhyayan Bhag-1*
- *Vyavasayik Adhyayan Bhag-2*

URDU TEXTBOOKS

Class I

- *Ibtedai Urdu 1*
- *Riyazee Ka Jadoo 1*

Class II

- *Ibtedai Urdu 2*
- *Riyazee Ka Jadoo 2*

Class III

- *Aas Pass (EVS)*
- *Ibtedai Urdu 3*
- *Riyazee Ka Jadoo 3*

Class IV

- *Aas Pass (EVS)*
- *Ibtedai Urdu 4*
- *Riyazee Ka Jadoo 4*

Class V

- *Aas Pass (EVS)*
- *Ibtedai Urdu 5*
- *Riyazee Ka Jadoo 5*

Class VI

- *Apni Zaban I*
- *Hamare Maazee I*
- *Hisab*
- *Jaan Pehchan (Second Language)*

- *Samaji Aur Siyasi Zindagi I*
- *Science*
- *Urdu Guldasta (Supplementary Reader)*
- *Zameen Hamara Maskan*

Class VII

- *Apni Zaban 2*
- *Door-Pass (Third language)*
- *Hamare Maazee II*
- *Hisab*
- *Jaan Pehchan, Second Language Urdu Textbook*
- *Samaj Aur Siyasi Zindagi*
- *Science*
- *Urdu Guldasta (Supplementary Reader)*

Class VIII

- *Apni Zaban*
- *Door-Pass (Third Language)*
- *Hamare Maazee 3 Part-I*
- *Hamare Maazee 3 Part-II*
- *Hisab*
- *Jaan Pehchan (Second Language)*
- *Samaji Aur Siyasi Zindagi*
- *Science*
- *Urdu Guldasta (Supplementary Reader)*
- *Wasail Aur Taraqqi (Geography)*

Class IX

- *Asri Hindustan I*
- *Door-Pass (Third Language)*
- *Gulzar-e-Urdu (Supplementary Reader)*
- *Hindustan Aur Asri Duniya I*
- *Ilm-e-Maashiyat (Economics)*
- *Jaan Pehchan (Second Language)*
- *Jamhoori Siyasat I*
- *Nawa-e-Urdu*
- *Riyazee*
- *Science*
- *Sub Rang*



Class X

- Door Pass (Third Language)
- Gulzar-e-Urdu (Supplementary Reader)
- Hindustan Aur Asri Duniya II
- Jaan Pehchan (Second Language)
- Jamhoori Siyasat II
- Maashi Taraqqi Ki Samajh
- Nawa-e-Urdu
- Riyazee
- Science
- Sub Rang

Class XI

- Dhanak (Supplementary Reader)
- Gulistan-e-Adab
- Hayatiyaat Part-I
- Hayatiyaat Part-II
- Hindustani Aain-Usool Aur Kam
- Hindustani Tabai Mahaul
- Hindustan Ki Maashi Taraqqi
- Jugrahiya Mein Amli Kam
- Karobari Uloom
- Keemiya Part-I
- Keemiya Part-II
- Khatadaari Part-I
- Khatadaari Part-II
- Khayaban-e-Urdu (Supplementary Reader)
- Mutala-e-Muashira
- Nafsiyat Ka Taruf
- Nai Awaz (Core Urdu Textbook)
- Riyazee
- Samajiyat Ka Taruf
- Samajiyat Ka Taruf
- Shumariyaat Barai Mashiyat
- Siyasi Nazaryah
- Tabai Jugrahiya Ke Mubodiyat
- Tabiyat Part-I
- Tabiyat Part-II
- Tareekh-e-Alam per Mabni Mauzuat (History)

Class XII

- Asri Alami Siyasat
- Azadi Ke bad Hindustani Siyasat
- Dhanak (Supplementary Reader)
- Gulistan-e-Adab
- Hayatiyat
- Hindustan Avam Aur Mashiyat
- Hindustani Samaj
- Hindustan Mein Samaji Tabdili Aur Taraqqi
- Insani Jughrafiya Ke Mubadiyat
- Insani Jugrafiya Ke Bunyadi Usool
- Jugrafiya Mein Amali Kam
- Juzvi Mashiyat Ka Taruf
- Karobari Uloom Part-I
- Karobari Uloom Part-II
- Keemiya Part-I
- Keemiya Part-II
- Khatadari Part-I
- Khatadari Part-II
- Khayaban-e-Urdu (Supplementary Reader)
- Kulli Mashiyat Ka Taruf
- Nafsiyaat
- Nai Awaz (Core Urdu Textbook)
- Riyazee Part-I
- Riyazee Part-II
- Tabiyat Part-I
- Tabiyat Part-II
- Tareekh-e-Hind Ke Mouzuat Part-I
- Tareekh-e-Hind Ke Mouzuat Part-II
- Tareekh-e-Hind Ke Mouzuat Part-III
- Urdu ki Adabi Asnaf (for Secondary and Senior Secondary Stages)
- Urdu ki Adabi Asnaf (for Secondary and Senior Secondary Stages)



- Urdu Qawaid aur Insha (for Secondary and Senior Secondary Stages)
- Urdu Qwaid Aur Insha (for Secondary and Senior Secondary Stages)
- Urdu Zaban-o-Adab ki Tareekh (for Secondary and Senior Secondary Stages)

RESEARCH REPORTS AND MONOGRAPHS

- Adhunik Bharat Ke Samajik Vicharak Swami Vivekanand Ke Samkalin
- Angrezi Shikshan Rashtriya Focus Samuh Ka Adhar Patra
- Anusuchit Jati Aur Janjati Ke Bachchon Ke Samasyain Rashtriya Focus Samuh Ka Adhar Patra
- A Report on NCERT's Sessions under Shikshak Parv 2020
- Assessment and Evaluation — A Textbook for two year B.Ed. Course
- Bhartiya Bhashaon Ka Shikshan Rastriya Focus Samuh Ka Adhar Patra
- Catch Me if you can
- Chemical Hazards and Disasters
- Conclave on School Education in 21st Century under the National Education Policy (A Report)
- Course Guide, International Diploma Course in Guidance and Counselling
- Curriculum Framework for Teacher Education
- Early childhood Education — An Introduction
- Earthquake
- Educational Rights of Children with Special Needs
- Emerging Concern Lifestyle related Issue
- Environmental Education, Class VI
- Every Child Matters — A Handbook on Quality Early Childhood Education
- Fire and Stampede
- Flood
- Food Poisoning
- Ganit Shikshan Rashtriya Focus Samuh Ka Adhar Patra
- Glimpses of Plant Life Part-I
- Guidelines for Pre-school Education
- Hamare Tumhare Afsane Supplementary Reader (Urdu)
- Hamari Kahani
- Health and Physical Education — Source Book on Assessment for Classes I-V
- HIV- AIDS
- Human Rights — A Source Book
- Indradhanush Hindi Star-2
- Indradhanush Hindi Star-3
- Indradhanush Hindi Star-4 Vidyalayi Shiksha Se Vanchit Hue Bachchon Ke Liye Setu Pathyakram
- Interactions — Activity Book on Listening and Speaking, Classes VI to X
- Izhaar Aur Zara-e Izhaar, Classes XI-XII (Urdu)
- Kamjor Drishti Vale Bachche Prathamik Vidyarthiyon Ke Adhyapako
- Kasturba Gandhi Balika Vidyalaya Bridge Course for Girls Entering Upper Primary Stage (English)
- Kasturba Gandhi Balika Vidyalaya Bridge Course for



- *Girls Entering Upper Primary Stage, Mathematics*
- *Kasturba Gandhi Balika Vidyalyaya Bridge Course for Girls Entering Upper Primary Stage, Science*
- *Knowledge Traditions and Practices of India*
- *Laboratory Manual Biology, Class XII*
- *Laboratory Manual Chemistry, Class XII*
- *Laboratory Manual Science, Classes VI–VIII*
- *Landslide*
- *Learning Outcomes at the Elementary Stage*
- *Life of Mirambika*
- *Madhyamik Vigyan Kit Manual Class – IX and X*
- *Manual for Secondary Mathematics Kit*
- *Manual for Upper Primary Science Kit, Classes, VI, VII and VIII*
- *Manual of Higher Secondary Biology Laboratory Kit*
- *Manual of Microscale Chemistry Laboratory Kit, Classes XI and XII*
- *Manual of Upper Primary Mathematics Kit*
- *Manual of Upper Primary Mathematics Kit*
- *Manual of Upper Primary Science Kit, Classes VI, VII and VIII*
- *Mathematics Learning Kit, Users Manual I and II*
- *Matra Bhasha Hindi Shikshan*
- *Memorandum of Association and Rules*
- *Diploma Course in Guidance and Counselling*
- *Module-10 Developing Mental Health and Coping Skills*
- *Module-11, Career Development-II*
- *Module-12 Career Information in Guidance and Counselling-II*
- *Module-13, Assessment and Appraisal in Guidance and Counselling-II*
- *Module-14, Basic Statistics in Guidance and Counselling-II*
- *Module-2, The Counselling Process and Strategies*
- *Module-3, Guidance for Human Development and Adjustment*
- *Module-5, Career Information in Guidance and Counselling-I*
- *Module-6, Assessment and Appraisal in Guidance and Counselling-I*
- *Module-7, Basic Statistics in Guidance and Counselling-I*
- *Module-8, Guidance in Action*
- *Module-9, Special concerns in Counselling*
- *Mosquito Borne Diseases Malaria and Dengue*
- *Musalsal aur Jamey Taaiyyun-e-qadr Rehnuma usool*
- *National Yoga Olympiad — A Report 18–20 June 2019*
- *NISHTHA, National Initiative for Schools Heads’ and Teachers’ Holistic Advancement*
- *NISHTHA –Package Bara-e-Qayadat (Urdu)*
- *Our Tree Neighbours*
- *Pariyojana Pustika Paryavaran Shiksha, Karain, Shikhein Aur Batain, Class VIII*
- *Pariyojana Pustika Paryavaran Shiksha, Karain, Sikhein Aur Batain, Class IX*
- *Pariyojna Pustika Paryavaran Shiksha, Karain, Sikhein Aur Batain, Class X*
- *Paryavaran Shiksha Karain, Sikhein Aur Batain, Class- VI*



- *Paryavaran Shiksha Karain, Sikhein Aur Batain, Class VII*
- *Paryavaran Shiksha Karain, Sikhein Aur Batain, Class VIII*
- *Play and Learn — A Manual for Preschool Education Kit*
- *Prachin Bhartiya Ganit Ke Etihastik Va Sanskritik Jhalkiyan*
- *Project Book in Environmental Education, Class VII*
- *Project Book in Environmental Education, Class VIII*
- *Purva Madhyamik Shiksha Ek Parichaya*
- *Purva Prathamik Pathyacharya*
- *Purva Prathamik Shiksha Ke Liye Disha Nirdesh*
- *Pustakon Se Pare Hamara Paryavaran Class 3 se 5 Ke Liye Kriyakalpa Bank*
- *R.T.E. Kya Hai? Shikshako Ke Liye Hastpustika*
- *Rahnuma Kitab Science Kit*
- *Rainbow, English Level-III*
- *Rainbow, English Level-IV Bridge Course for Out of School Children*
- *Rainbow, Level-II, Bridge Course for Out-of-School Children*
- *Readiness Activities for Beginners, Activity Book-I*
- *Readiness Activities for Beginners, Activity Book-II*
- *Resource material for Mathematics club Activities*
- *Samajik Vigyan Ka Shikshan Rashtriya Focus Samuh Ka Adhar Patra*
- *Sanitation and Hygiene*
- *Sankhyaon Se Khel, Ganit Star-2, Class II*
- *Sankhyaon Se Khel, Ganit Star-3*
- *Satat Avam Vyapak Mulyankan Disha Nirdesh*
- *Shiksha Me Samaveshan Vidyalaya Prabandhan Samiti Ke Liye Sandarshika*
- *Sikhne Ke Pratiphal (Madhyamik Star Par)*
- *Social Thinkers of Modern India Contemporaries of Swami Vivekananda*
- *Social Thinkers of Modern India Contemporaries of Swami Vivekananda*
- *Source Book on Assessment for Classes VI–VIII, Mathematics*
- *Sukti Saurabham Uchch Prathamik Star Ke Vidyarthyon Ke liye*
- *Sukti Sorabham, Madhyamik Star ke Shiksharthiyo ke liye*
- *Suno Kahani, Uchch Prathamik Star Ke Liye Hindi Ke Purak Pustak*
- *Swine Flu*
- *Drought*
- *Tamanna — An Aptitude Test for Senior School Students*
- *Tamanna — School Ke Varishtha Vidhyarthion Hetu Ek Abhishamta Parikshan*
- *Teacher's Self-assessment Guidelines and Rubrics*
- *Theme based Early Childhood Care and Education Programme*
- *The Role of Begums of Bhopal in Girls' Education*
- *The Story of Nai Talim*
- *The Story of Nai Talim Fifty Years of Education at Sevagram India*
- *Trainer's Handbook in Early Childhood Care and Education*
- *Tsunami*
- *Uchch Prathamik Ganit Kit Ki Nirdesh Pustika*
- *Vanaspati, Karbanik Padarthon Ki Anoothi Prayogshala*
- *Vanaspati Vidhika*



- *Vedparijat, Uchchatar Madhyamik Star Ke Liye Purak Pustika*
- *Veer Gatha*
- *Veer Gatha, Paramveer Chakra Vijetaon Ke Kahaniyan*
- *Vigyan Shikshan, Rashtriya Focus Samuh Ka Adhar Patra*
- *We are one*
- *What is RTE?*
- *Yog, Uchch Prathamik Star*
- *Yog Prathamik Star*

TEXTBOOKS FOR OPTIONAL SUBJECTS

- *Laboratory Manual, Science Class X*
- *Adhunik Bharat Ke Samajik Vicharak Swami Vivekanand Ke Samkalin*
- *Bhautik, Prashn Pradarshika, Class XI*
- *Bhautik Prashn Pradarshika Class XII*
- *Exemplar Problems Mathematics, Class X*
- *Ganit, Prashn Pradarshika Class VI*
- *Ganit, Prashn Pradarshika, Class VI*
- *Ganit, Prashn Pradarshika, Class VIII*
- *Ganit, Prashn Pradarshika, Class X*
- *Ganit, Prashn Pradarshika, Class XII*
- *Ganit, Prashn Pradarshika Class IX*
- *Ganit, Prashn Pradarshika Class VIII*
- *Ganit, Prashn Pradarshika Class XI*
- *Inclusion in Education — A Manual for School Management Committee*
- *Jeev Vigyan, Prashn Pradarshika Class XI*
- *Khelein Aur Sikhein, Purva-Prathmik Shiksha Kit Manual*
- *Laboratory Manual, Biology, Class XI*
- *Laboratory Manual, Mathematics, Elementary Stage*
- *Laboratory Manual, Physics, Class XI*
- *Laboratory Manual, Physics Class XII*
- *Laboratory Manual, Science Classes VI–VIII*
- *Laboratory Manual, Chemistry, Class XI*
- *Laboratory Manual, Mathematics, Higher Secondary Stage*
- *Laboratory Manual Mathematics, Secondary Stage*
- *Laboratory Manual Physics Class XII*
- *Laboratory Manual Secondary Stage Mathematics*
- *Manual of Higher Secondary Physics Laboratory kit Classes XI and XII*
- *Mathematics, Exemplar Problems*
- *Mathematics, Exemplar Problems, Class VI*
- *Mathematics, Exemplar Problems Class VIII*
- *Prashn Pradarshika, Rasayan, Class XI*
- *Prashn Pradarshika, Class VIII*
- *Prashn Pradarshika Vigyan Class X*
- *Prayogshala Pustika, Bhautiki Class XII*
- *Prayogshala Pustika, Rasayan, Class XI*
- *Prayogshala Pustika Bhautik, Class XII*
- *Prayogshala Pustika Ganit, Prarambhik Star*



- *Prayogshala Pustika Madhyamik Star, Ganit*
- *Prayogshala Pustika Rasayan, Class XI*
- *Prayogshala Pustika Rasayan, Class XII*
- *Prayogshala Pustika Vigyan Classes VI–VIII*
- *Rasayan Prashan Pradarshika Class XII*
- *Science, Exemplar Problems, Class VII*
- *Science, Exemplar Problems, Class VII*
- *Science, Exemplar Problems, Class VIII*
- *Science, Exemplar Problems, Class VI*
- *Science, Exemplar Problems, Class VI*
- *Vigyan, Prashn Pradarshika, Class IX*
- *Vigyan Prashn Pradarshika, Class VII*

TEACHERS' GUIDE

- *Art Education — Teacher's Handbook, Class V*
- *Art Education — Teacher's Handbook for Classes VII–VIII*
- *Art Education Teacher's Handbook for Class II*
- *Art Education — Teacher's Handbook for Class I*
- *Ganit Adhigam Kit — Adhyapak Sandarshika, Class I and II*
- *Khel-Khel Mein, Purva Prathmik Kakshao Ke Liye Shikshak Sandarshika*
- *Teacher's Handbook for Class VI, Science*
- *Training Package on Art Education for Primary Teachers*

SUPPLEMENTARY READER

- *Aao Tamil Nadu Chale*

- *Aise Jana Rail Ka Khel*
- *Ajadi Ki Ladai Ka Sapna*
- *Amma Hum bhi Sath Chale*
- *Ande Hi Ande*
- *Bahadur Dost*
- *Bahuroopee Gandhi*
- *Balu Bole Apni Baat*
- *Bhai Sahab*
- *Bharat Ki Khoj*
- *Bharat Me Chini Yatri*
- *Bhari Kon*
- *Charles Darwin Ki Atmakatha*
- *Chunni Aur Munni*
- *Contours of Courage*
- *Dharti Ke Lal — Prayogik Sanskaran*
- *Discovered Questions*
- *Dr. Bhimrao Ambedkar: His Life and Work*
- *Dr. Bhimrao Ambedkar: Jeevan Aur Karya*
- *Frans (Hindi)*
- *Gandhiji ke Ashram Me*
- *Ghadiyon Ki Hadtal*
- *Ghar Ki Khoj*
- *Hamara Adbhut Vayumandal Ab Maila Kyon?*
- *Hamara Arunachal Pradesh*
- *Hamara Bharat Varsh*
- *Hamara Gujarat*
- *Hamari Madad Kon Karega?*
- *Harama Arunachal Pradesh*
- *Health Matters — Homoeopathy: Introduction for Children*
- *Kahani Shalya Chikitsa Ki*
- *Kale Sagar Ka Desh Romaniya*
- *Kamal Ka Mannu*
- *Kauwwe Ka Bachcha*
- *Khoje Hue Prasn*
- *Kyon?*
- *Madhyakalin Bhartiya Ganit Ki Ethisik Va Sanskritik Jhalak*
- *Manoti*



- *Masum Man ka Jadu*
- *Meghnad Saha*
- *Mera Ghar*
- *Nai Nai Kahaniyan*
- *Nanha Rajkumar*
- *Our India*
- *Pahad Se Ucha Admi*
- *Patang Ke Pench*
- *Philately*
- *Ram Prasad Bismil Ki Atmakatha*
- *Rasoi Ghar*
- *Sagar Tal Par Ek Khan Bahudhatvik Pindo Ki*
- *Samudra Kuber Ka Ek Bhandar*
- *Sangeet Ka Lahrata Sagar*
- *Santhal Jeevan Avam Sanskriti Ki Ek Jhalak*
- *Sarojini Naidu*
- *Sasneh Muzaffarpur Se*
- *Simmi's Journey Towards Cleanliness, Supplementary Material*
- *Solar System for Everybody*
- *Subhas Chandra Bose: A Biography*
- *Tara Ke Alwar Yatra*
- *Tenjing Korge*
- *The Cellular Jail in our Freedom Struggle*
- *The Finger on the Lute*
- *The Indian Army: A Glorious Heritage*
- *The Magic of Innocence*
- *Toto Aur Billi*
- *Urao Lokgeet Evam Lok Kathaein*
- *Vasco Di Gama*
- *Vimla in Virusland*
- *Virus Lok Me Vimla*
- *What on Earth is Energy?*
- *Chai*
- *Chalo Pipni Banaein*
- *Chawal*
- *Chhupan Chhupai*
- *Chimti Ka Phool*
- *Chunni Aur Munni*
- *Gehoon*
- *Gilli Danda*
- *Gol Gappe*
- *Hamari Patang*
- *Hich Hich Hichki*
- *Jeet Ki Pipni*
- *Jhoola*
- *Koodti Juraben*
- *Mausi Ke Moze*
- *Maza Aa Gaya*
- *Meethe Meethe Gulgule*
- *Mere Jaisi*
- *Mili Ka Gubbara*
- *Mili Ke Baal*
- *Mily ki Cycle*
- *Mini Ke Liye Kya Loon?*
- *Mithai*
- *Moni*
- *Munmun Aur Munnu*
- *Nani Ka Chashma*
- *Oon Ka Gola*
- *Out*
- *Paka Aam*
- *Pattal*
- *Peeloo Ki Gulli*
- *Phuli Roti*
- *Rani Bhi*
- *Sharbat*
- *Tabla*
- *Talab Ke Maze*
- *Tosia Ka Sapna*
- *Tota*

BARKHA SERIES (HINDI)

- *Babli Ka Baja*
- *Bhutta*

BARKHA SERIES (SANSKRIT)

- *Asmak Patingka*
- *Bablya: Vadayam*



- *Bhuttakam*
- *Chayam*
- *Chunni Munni ch*
- *Dola*
- *Fullita Rotika*
- *Godhuma*
- *Golgappakam*
- *Gopnagopnam*
- *Gulli Dand: ch*
- *Harsh: Jat*
- *Hik-Hik Hikka*
- *Jeetsay Pipnika*
- *Keshansadshikaya: Pushpam*
- *Kudramaane Padavarke*
- *Maadrshi*
- *Madhurani Gulgulani*
- *Matamahya: Upnetram*
- *Matrswasu: Padavarkam*
- *Milya: Dwichakrika*
- *Milya: keshaa:*
- *Milya: Vayulunam*
- *Mimya: Krite ki Nayani?*
- *Mishtannam*
- *Moni*
- *Munmun: Munnu: ch*
- *Nirgat:*
- *Oadnam*
- *Pakvam*
- *Patrlam*
- *Pilva: Gulli*
- *Pipnika Rachyem*
- *Prapankam*
- *Rani Api*
- *Sarovartate Aamod:*
- *Shuk:*
- *Tabal:*
- *Tosiyaya: Swapan:*
- *Uransya Golkam*

CHILDREN'S LITERATURE SERIES

- *A Gajra for Amma*
- *Best of All*

- *Chandu's Chaat*
- *Ducky Little*
- *Go Green*
- *Grumpy Geeta*
- *Hello Rain*
- *Knock Knock*
- *Lazy Juju*
- *Lonely Goldy*
- *May Be It Is*
- *The Baby Bulbuls*
- *The Kite*
- *The Three Rabbits*

VOCATIONAL EDUCATION BOOKS

- *Assistant Mason, Class X*
- *Assistant Mason, Class IX*
- *Automotive Service Technician, Class XI*
- *CRM Domestic Voice, Class XI*
- *Customer Service Executive, Class XI*
- *Diary Farmer-II, Class XII*
- *Employability Skills, Class IX*
- *Employability Skills, Class X*
- *Employability Skills, Class X*
- *Employability Skills, Class XII*
- *Floriculturist Open Cultivation, Class XII*
- *Food and Beverage Service Trainee, Class IX*
- *General Mason, Class XI*
- *Housekeeping Attendant Manual Cleaning, Class IX*
- *Optical Fibre Splicer, Class XI*
- *Optical Fibre Splicer Class IX*
- *Paddy Farmer, Class IX*
- *Paddy Farmer, Class X*
- *Plumber (General), Class X*
- *Plumber General, (Samanya) (Karya Bhumika) Class IX*
- *Texturing Artist, Class XI*



- *Warehouse Binner, Class IX*
- *Wireman Control Panel, Class XI*

UNPRICED PUBLICATION

- *Annual Accounts 2019–20*
- *Annual Report 2019–20*
- *NCERT Varshik Report 2019–20*
- *Varshik Lekha 2019–20*

JOURNALS

- *Bhartiya Adhunik Shiksha, Ank 1 July 2019*
- *Bhartiya Adhunik Shiksha, Varsh 40, Ank 2, October 2019*
- *Firkee Bachchon Ki Ank 1, June 2020*
- *Firkee Bachchon Ki Ank 2, December 2020*
- *Indian Educational Review Vol. 57, No. 1, January 2019*
- *Indian Educational Review Vol. 57 July 2019*

- *Journal of Indian Education, No. 2, August 2019*
- *Journal of Indian Education, No.3, November 2019*
- *Journal of Indian Education, No.4, February 2020*
- *Journal of Indian Education Vol. XLV, No.1, May 2019*
- *Prathmik Shikshak, Ank 2 April 2019*
- *Prathmik Shikshak, Ank 3 July 2019*
- *Prathmik Shikshak, Ank 4 October 2019*
- *Prathmik Shikshak Varsha 44, Ank 1 January 2020*
- *School Science, September 2015*
- *School Science Vol. 53, December 2015*
- *The Primary Teacher, July 2016*
- *The Primary Teacher, October 2016*



APPENDIX VIII

Publication Division and its Regional Production-cum-Distribution Centres

S.No.	Name of the Centre	Regions Covered
1.	Publication Division NCERT Campus, Sri Aurobindo Marg New Delhi 110016 Phone: 011-26562708 Fax: 011-26851070 email: cbm.ncert@nic.in	Foreign Countries, Delhi, Parts of Rajasthan, Jammu and Kashmir, 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 Hoskere Halli Extension Banashankari 3rd Stage Bengaluru-560 085 Phone: 080-26725740	Tamil Nadu, Puducherry, Kerala, Andhra Pradesh, Karnataka, Lakshadweep Minicoy and Amindivi Islands
4.	Regional Production-cum-Distribution Centre Publication Division, NCERT CWC Campus (1st Floor) Kishori Mohan Banerjee Road Opp. Dhankal Bus Stop, P.O. Panihati Kolkata-700 114 Phone: 033-25530454	West Bengal, Bihar, Jharkhand, Odisha, Andaman and Nicobar Islands and Sikkim
5.	Regional Distribution Centre NCERT, CWC Godown Maligaon, Guwahati -781 011 Phone: 0361-2674869	North Eastern States



NCERT'S 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) A.K. Rajput
- (iii) Usha Sharma
- (iv) Sandhya Sangai
- (v) Virender Pratap Singh
- (vi) Padma Yadav
- (vii) Kavita Sharma
- (viii) Varada Mohan Nikalje

Associate Professors

- (ix) Ramesh Kumar
- (x) Romila Soni

Assistant Professors

- (xi) Reetu Chandra
- (xii) Sarla Kumari Verma

Headmistress

- (xiii) Jyoti Kant Prasad

Nursery Teacher

- (xiv) Sunayana Mittal
- (xv) Poonam

DEPARTMENT OF EDUCATION OF GROUPS WITH SPECIAL NEEDS (DEGSN)**Professors**

- (i) S.C. Chauhan (Head)
- (ii) Vinay Kumar Singh



Associate Professor

- (iii) Ranjan Biswas

DEPARTMENT OF EDUCATIONAL PSYCHOLOGY AND FOUNDATIONS OF EDUCATION (DEPFE)**Professors**

- (i) Parbhat Kumar Mishra (Head)
- (ii) Anjum Sibia

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) A.K. Wazalwar
- (iv) R.K. Parashar
- (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) Gouri Srivastava (Head)
- (ii) Neeraja Rashmi
- (iii) Shipra Vaidya
- (iv) Pratyusha Kumar Mandal
- (v) Aparna Pandey
- (vi) Shankar Sharan
- (vii) Seema Shukla Ojha
- (viii) Jaya Singh



- (ix) M.V. Srinivasan
- (x) Tannu Malik

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- (xi) Pratima Kumari
- (xii) Bijaya Kumar Malik

Assistant Professor

- (xiii) Harish Kumar Meena

DEPARTMENT OF EDUCATION IN LANGUAGES (DEL)

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- (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) Kirti Kapur
- (xi) R. Meganathan

Associate Professors

- (xii) Chaman Ara Khan
- (xiii) Naresh Kohli
- (xiv) Meenakshi Khar

DEPARTMENT OF GENDER STUDIES (DGS)

Professors

- (i) Mona Yadav (Head)
- (ii) Poonam Agarwal
- (iii) Mily Roy Anand

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Professors

- (i) Ranjana Arora (Head)
- (ii) Braham Prakash Bhardwaj
- (iii) Kiran Walia
- (iv) Madhulika S. Patel
- (v) Sharad Sinha

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- (vi) Vijayan K.
- (vii) 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) A.K. Rajput (Head)
- (ii) Shveta Uppal (Chief Editor)
- (iii) Arun Chitkara (Chief Production Officer)
- (iv) Vipin Dewan (Chief Business Manager)

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- (ii) M. Samantaray

Assistant Librarian

- (iii) Pooja Jain

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- (i) Anupam Ahuja (Head)

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Associate Professors

- (i) Ashita Raveendran (I/c Head)
- (ii) P.D. Subhash

DIVISION OF EDUCATIONAL RESEARCH (DER)

Professor

- (i) A.K. Srivastava (Head)

EDUCATIONAL SURVEY DIVISION (ESD)

Professor

- (ii) Indrani Bhaduri (Head)

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- (iii) Sukhwinder



Assistant Professors

- (iv) Satya Bhushan
- (v) Gulfam
- (vi) Vishal D. Pajankar

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- (vii) A.D. Tewari, In charge

DIVISION OF EDUCATIONAL KITS (DEK)**Professors**

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- (ii) Ashish Kumar Srivastava

CURRICULUM GROUP (CG)**Professor**

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- (xiv) R. Ravichandran

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- (iii) Rajesh Mishra
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- (viii) Ayushman Goswami
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- (xvi) V. P. Arya
- (xvii) Jai Prakash Narayan
- (xviii) O. P. Meena
- (xix) Rana Pratap
- (xx) R.K. Sharma
- (xxi) Muzammil Hasan
- (xxii) Patanjali Sharma
- (xxiii) Rajiv Ranjan
- (xxiv) Sneh Sudha
- (xxv) Ranjana Nagar

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- (xxv) Sujata B. Hanchinalkar
- (xxvi) Raman Namboodiri C.K.
- (xxvii) Santosh Kumar
- (xxviii) Madhu B.
- (xxix) K. Suresh Kumar
- (xxx) Sarvesh Maurya

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- (xv) Arneb Sen
- (xvi) B. Umesh Kumar Sharma
- (xvii) R. A. Singh
- (xviii) Seema R.





विद्यया ऽ मृतमश्नुते



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