Dayalbagh Educational Institute (Deemed to be University)

Executive Summary

"Education, more education, education made perfect is the only panacea for our country's ills and evils."

Sir Anand Sarup Kt., August Founder of Dayalbagh
(*Convocation Address, Agra University, 1935*)

The DEI Education Policy was formulated in 1975 with a focus on the development of all three dimensions of a human being, i.e., physical, mental and spiritual, which can be achieved by undertaking intellectual, physical and social activities. The Institute has successfully implemented a unique scheme of innovative, comprehensive, inter-disciplinary, flexible and value-based education, based on total quality management that fosters academic excellence along with holistic development, from pre-school to university level.

DEI was accorded the status of *'Deemed to be University'* by the Government of India, under Section 3 of the UGC Act of 1956, on May 16, 1981 and approve of 12B status on March 28, 2018. DEI is also an ISO:9001-2015 certified Institute since January, 2017.

DEI has a beautiful campus sprawling 86 acres, located in the serene environment of Dayalbagh, near the city of Agra. DEI comprises six faculties, namely, Arts, Commerce, Education, Engineering, Science, and Social Sciences that have 23 Departments, which offer 128 programmes that include UG, PG, MPhil and PhD programmes.

DEI has made innovations to integrate various forms of education and design multiple entry and exit pathways to provide educational opportunities to all sections of the society. In this endeavour, DEI has pioneered Vocational Education in the country, by demonstrating a model integrated system of education. It has also led the blended-mode of ICT-enabled Online Education.

DEI is committed to provide outcome based, industry focused education and nurtures an inclusive environment to serve diverse needs of students, faculty and staff. DEI enforces continuous quality enhancement and is accredited and recognized by various academic and professional bodies. It has established strong linkages with Industry and academia for collaborative teaching and research.

DEI has a well-planned strategic roadmap to achieve its vision and mission through its exemplary education system. It has launched a bold and ambitious VISION-2031 strategic plan, with clearly defined objectives to achieve excellence.

The Institute has received tremendous appreciation and recognition for its exemplary system of education and its contributions to national development.

- *National Award for Concentrated Solar Technologies, Ministry of New & Renewable Energy, GoI, 2016.*
- *UP State Energy Conservation Awareness Award 2016.*
- *Recognition under 12B, 2018*
- *A Category, 3rd Rank : Review of Deemed Universities, by Prof. P.N. Tandon Committee 2009*
- *ISO – 9001:2015 Certified Institution*
- *NAAC : B++ (2005); A (2013); A+ (Score: 3.4) (2019)*
- *NIRF Universities-2016: 91; 2017: 72; 2018: 63; 2019: 77*
- *SWACHHTA Ranking: 5th Cleanest Institute in India, 2017*

- *Champion 2017: Best Solar Skills Training Institute, Renewable Energy India Expo, September 21, 2017, Greater Noida.*
- *NBA Accredited Engineering Programmes, 2019*
- *Mentor Institute under UGC Paramarsh Scheme, 2019*
- *Declared one of the five Green Campuses in India by the MNRE, 2017.*
- *1st Rank in AICTE Utkrisht Sansathan Vishwakarma Award, 2019.*
- *UP NEDA Save Energy Award 2019.*
- *Contributed in developing the recommendations of UGC outcome-based evaluation reforms for higher education and training across the country, 2019.*
- *MHRD funded School of Education, Pt. MM Malviya National Mission on Teachers & Teaching, 2019*
- *Ministry of Textiles empanelled DEI as Govt. Training Partner with UPSDM for Skilling SC/ST, 2019*
- *DST Mission Innovation Smart Grid Project, with IIT Roorkee & Univ. of Tromso, Norway, 2019.*
- *EU-DST ERA-Net Smart Energy Systems & Mission Innovation on Energy Storage Solutions, 2020.*

Vision and Mission

Our vision is to be a leading Teaching-cum-Research Institute with focus on Entrepreneurial Education and Consciousness Studies. DEI is a model Deemed to be University that believes in excellence with social relevance, imparting values-based and quality education, with the objective of reaching the last, the least, the lowest and the lost; contributing to nation and community by empowering weaker sections, women and children; building the economy through research, entrepreneurship and frugal innovation, anchored in the principle of achieving more with less.

The Systems model of DEI Education System is based on Total Quality Management that rests on the six pillars of Education namely, School, Technical, Skill, University, ICT enabled online and Entrepreneurial Education.

Academic Profile of the Institute

The total number of programmes offered by DEI has increased from 96 in 2013-14 to 128 in 2018-19. The number of students has increased from 3815 in 2014-15 to 7526 in 2018-19. The demand for the quality education at affordable cost being offered by DEI is evident from the year-on-year increase in the number of applicants. For academic year 2018-19, 39132 applicants had applied from which 7526 were admitted. There are 291 full time faculty members (49% women staff) out of which 208 have Ph.D. degree. The Teacher Student Ratio is 1:26 (2018-19) which ensures individual attention to the learning and growth of the students. 68% of the total students are girls and as high as 90% students are from economically weaker sections.

Diverse Multi-disciplinary and Flexible Curriculum

DEI has Core Courses for all UG students, including Rural Development, Agriculture Operations, Social Service, Games & Sports, Cultural Education, Co-curricular Activities, Disaster Management, Environmental Studies, Comparative Study of Religion, Scientific Methodology, General Knowledge and Current Affairs. There are interdisciplinary courses across all programmes and work-based Training Courses allied to major subjects. There are courses with specific emphasis on Consciousness Studies and Entrepreneurial Studies.

DEI provides students with a flexible curriculum that includes Choice Based Credit system (CBCS), interdisciplinary/multidisciplinary/transdisciplinary electives, modular, certificate, diploma and degree programmes, with provision for lateral entries and multiple entries/exits.

Learning-Outcome based Curriculum Framework (LOCF) and Annual Revision of Curriculum

The courses offered by DEI have been designed/re-aligned based on LOCF. All students are apprised of LOCF on admission and at the beginning of each course by instructors. The variety of elements for continuous assessment and feedback mechanisms in DEI enable effective direct and indirect monitoring and measurement of outcomes and appropriately identify and address gaps.

The curriculum is regularly reviewed through Curriculum Workshops and by external experts based on feedback from stakeholders, analysis of current market trends, industrial requirements and national and international standards, in the Departmental and Faculty Board of Studies Meetings. Further, it is also reviewed by the Academic and Administrative Audit Committee (AAAC), IQAC and the Advisory Committee on Education. The programs are approved by statutory regulatory authorities UGC, AICTE, NBA, NCTE and CoA.

Examination Reforms

The Examination System of DEI has been automated with Learning Management System (LMS) and OMR Based Evaluation System. The Internal and End-Semester Examinations are conducted in a centralised manner for optimal utilization of physical as well as manpower resources, increased vigilance and smooth conduct of the examinations.

Daily Home Assignments (DHAs), which are short assignments on topics covered in lectures, have been introduced in all programmes in the Institute. Further, there are Weekly Class Assignments (CAs) on topics covered in class in the form of a short quiz. The Common Courses are graded centrally to ensure uniformity and transparency in grading and moderation.

More flexibility in the curriculum has been provided with students permitted to earn credit up to 20% of their credit requirement through online offerings such as SWAYAM and NPTEL. There is facility for Online Viva-Voce Examination through video-conferencing in India and abroad.

Training of Students in Essential Professional Skills

Based on the principle of 'Learning by Doing', a large proportion of courses in each programme have a high practical component to provide hands on experience to the students. There are compulsory Work-Based Trainings in all UG Programmes and One Semester Immersive Co-operative Industrial Internship in professional courses.

DEI also runs Vocational and Skill courses, ICT and other Value-added courses: Soft Skills, TALLY, Resume Writing and Interview Skills. There is a component of Seminar and Group Discussion in each course.

DEI has created the first '*Skillpedia*' in regional languages called Massive Open Online Courseware Skilling and Entrepreneurship Network for India (MOOCSKENE-BHARAT) which offers free online learning in multiple languages through ICT-based instruction across the country. The innovative venture will help to extend the benefits of the DEI's innovative and flexible educational model that

integrates regular education from the school to the university level with skilling, vocational and technical education, with emphasis on entrepreneurship, to all sections of society.

Student Placement and Progression

There was 100% student placement and progression to higher education in the years 2014-15, 2015-16 and 2015-16 and more than 70% in 2017-18 and 2018-19.

Research and Publications

In the last 5 years, 5 patents have been granted to DEI and 4 more have been applied for. The h-Index of DEI is 53 and there have been 13,764 citations of the publications of its faculty and students. There are 6 UGC-SAP funded and 6 DST-FIST funded departments in the university. In the last 5 years, 81 national and international conferences, seminars and workshops have been conducted. During the year 2018-19, Rs. 40.40 Crores were received in form of grants for various research projects.

DEI provides opportunities for and promotes research in trans-disciplinary areas such as Esoteric Art & Science, Digital Life, Thinkism, Life & Mathematics, Sustainability, Classical Studies, Agriculture, Maintenance Network and Entrepreneurship. DEI has also recently conducted wide-ranging studies on its societal-impact.

A New Frontier: Science of Consciousness

DEI is being recognised as a leading university in the Science of Consciousness. Experimental studies on neurotheology and consciousness are being facilitated by the SQUID (Super-conducting Quantum Interference Device) Magnetoencephalography (MEG) facility in the DEI Centre for Consciousness Studies. DEI has set up (i-c-n-c) TALL facility for teaching and learning of various languages using technology and promoting interdisciplinary research in consciousness, literature, language learning and teaching. The Superman Evolutionary Scheme is a novel experiment in early childhood education and consciousness.

DEI hosts the Second International Conference on Dayalbagh Science of Consciousness (DSC 2020) on May 22, 2020 in collaboration with University of Waterloo, Ontario, Canada.

DEI has Collaborations & MoUs with 45 National and 19 International Institutions. It has MoUs with 33 Industry Partners and has collaborations with 44 research institutions and 5 Hospitals.

At DEI, innovation permeates each and every dimension of the Institute. Some key innovative efforts of DEI include 100% renewable energy powered campus; '*From Skilling to Entrepreneurship*' through Innovative *Karkhanas* (workshops) for providing training and entrepreneurial skills to the youth, women and other weaker sections of the society, viz. ATMA (Apparel and Toy Making Association), ADyNam (Agricultural and Diary Nano Processing of Multi-Products) and AAM (Automotive And Multi-skilling Garage); Start-Up Incubators – REZ to SEZ model, '*Jugaad'* (Frugal) Innovations and ICT-based Initiatives like SCOTLS (Student-Centric Online Teaching-Learning System) – an interactive customized system of Online Teaching designed at DEI for teaching to schools in remote areas, Optical Network for reaching High Speed Data to adopted remote villages, Surveillance Network at

DEI and neighbouring communities and Biometric Identification of infants (in collaboration with Stanford University).

The Ministry of Textiles has empanelled DEI as Govt. Training Partner with UPSDM for Skilling SC/ST. DEI is collaborating on DST Mission Innovation Smart Grid Project, with IIT Roorkee & Univ. of Tromso and is a partner in EU-DST ERA-Net Smart Energy Systems & Mission Innovation on Energy Storage Solutions, 2020.

Innovative measures taken in education include creation of Virtual Labs (MHRD, NMEICT) to expand the access to laboratory experimentation in remote areas and Frugal Science Experiments such as *Foldscope* (a paper folding real microscope @ $1) developed by Manu Prakash a young researcher from Stanford, has been widely used by children of DEI schools to explore the hidden secrets of their surroundings.

B. Voc. Courses – with Spirit of Service to Society

DEI is currently running 21 Bachelor in Vocation (B.Voc.) in both science and non-science groups. B.Voc. courses being run by DEI include Agriculture Technology, Accounting and Taxation, Agriculture Technology, AI Robotics, Automobile, Banking and Finance, Apparel Design, Dairy Technology, Digital Manufacturing, Food Processing & Preservation, Green House Technology, Commercial Art, Pottery and Ceramics Design, Renewable Energy, Telematics, Textile Designing, Tourism and Hospitality Management, Water, Sanitation and Waste Management, Internet of Things, Telecommunication, Bamboo and Wood Technology and Recycled Craft Design.

B.Voc. course in DEI have a special emphasis on retailing and Earn-While-You-Learn and multiple start-ups have been founded by students graduating out from these courses.

Extension and Outreach

The Societal Contribution of DEI is uniquely planned and implemented. It is equipped to meet the international benchmarks of sustainable development as laid down by agencies like UNESCO (SDG, 2017) and at the same time makes an effort to go beyond them by targeting the highest conceivable development of mankind in terms of body, mind and spirit.

DEI is promoting Triple Sigma Six Q-V-A way of Sustainable Living which includes six dimensions of qualities and values, viz. Innovation, Human values, Air Quality, Water Quality, Health and Education, Agriculture and Dairy, and three attributes of Smart, Mobility and Resilience, with Entrepreneurship.

The impact of our societal outreach, which is being carried out at 450 +/- 1 nodes is becoming increasingly visible in all these areas through a number of success stories. An authentic role model of rural and tribal community development is there to see in the tribal village cluster of Rajaborari located in the forest heartland of Madhya Pradesh.

Business Advisory Clinic

A Business Advisory Clinic provides free consultancy to Business firms and Industries facing difficulties. Faculty members and students take up real life case studies and offer appropriate guidance. More than 10,000 cases have been taken up and resolved satisfactorily, since its inception in 2005.

Strong Alumni Support

DEI has a strong alumni support with a vibrant Alumni Association of DEI (AADEIs) and Alumni and Friends of DEI (AAFDEIs) registered in USA. It regularly engages with its alumni through alumni meets, IQAC meetings, alumni mentorship, career counselling of students, conducting short value-added courses, workshops and conferences, curriculum review and job fairs.

Contribution to National Missions

DEI has made significant contributions towards the success of the following National Missions:

- *Digital India (Education through ICT)*
- *Make in India*
- *Swachh Bharat Abhiyan*
- *Unnat Bharat Abhiyan*
- *Women Empowerment*
- *Skilling India*
- *Solar Energy Mission*
- *Fit India*
- *Smart City*

Recent Efforts in the wake of COVID-19

In spite of the corona virus pandemic, the academic calendar of DEI is on schedule with zero disruption. Strict adherence to pre-announced Academic Calendar has been ensured by online teaching and continuous evaluation of theory and practical exams.

Through its state-of-the-art ICT Infrastructure and initiatives such as *Vidyaprasar* - the DEI Open Course Portal and *e-DEI-World Wide Web* (Not for profit) or eDEIwww.education, **e**-(online) video conferenced mode – for online video mode content delivery, with online consulting, and discussion forums through audio and video conferencing, DEI has ensured continuing education for its students. Other initiatives such as SWAYAM@DEI, Digitization of all courses by Department of Management and Virtual Laboratories have also played a key role. Online Seminars and conferences have been conducted with pan-India participation. Preparation is underway for online entrance tests during June-July, 2020 and next session 2020-21 will begin on-time.

Concluding Remarks

Eminent leaders, educationists and academicians that include honourable Shri R. Venkataraman and honourable Dr. A.P.J. Abdul Kalam, both Presidents of India, Prof. Richard Ernst, Nobel Laureate, have been impressed by the novelty and the farsightedness of the Founders of the system. Most of the ideas that are part of policy documents being prepared at various levels have already been successfully implemented in DEI.

The successful implementation of this innovative, comprehensive and integrated value-education system is distinctive to its vision, priority and thrust. DEI is geared to lead and contribute to the advancement of human knowledge and attain wisdom to develop a more humane and enlightened society with its exemplary system of education.

DEI has already demonstrated a successful working model to affect social transformation, meet the emerging global challenges and contribute to sustainable national development. DEI incessantly strives towards excellence with relevance to open up new vistas for holistic learning and fulfil contemporary and futuristic needs.