

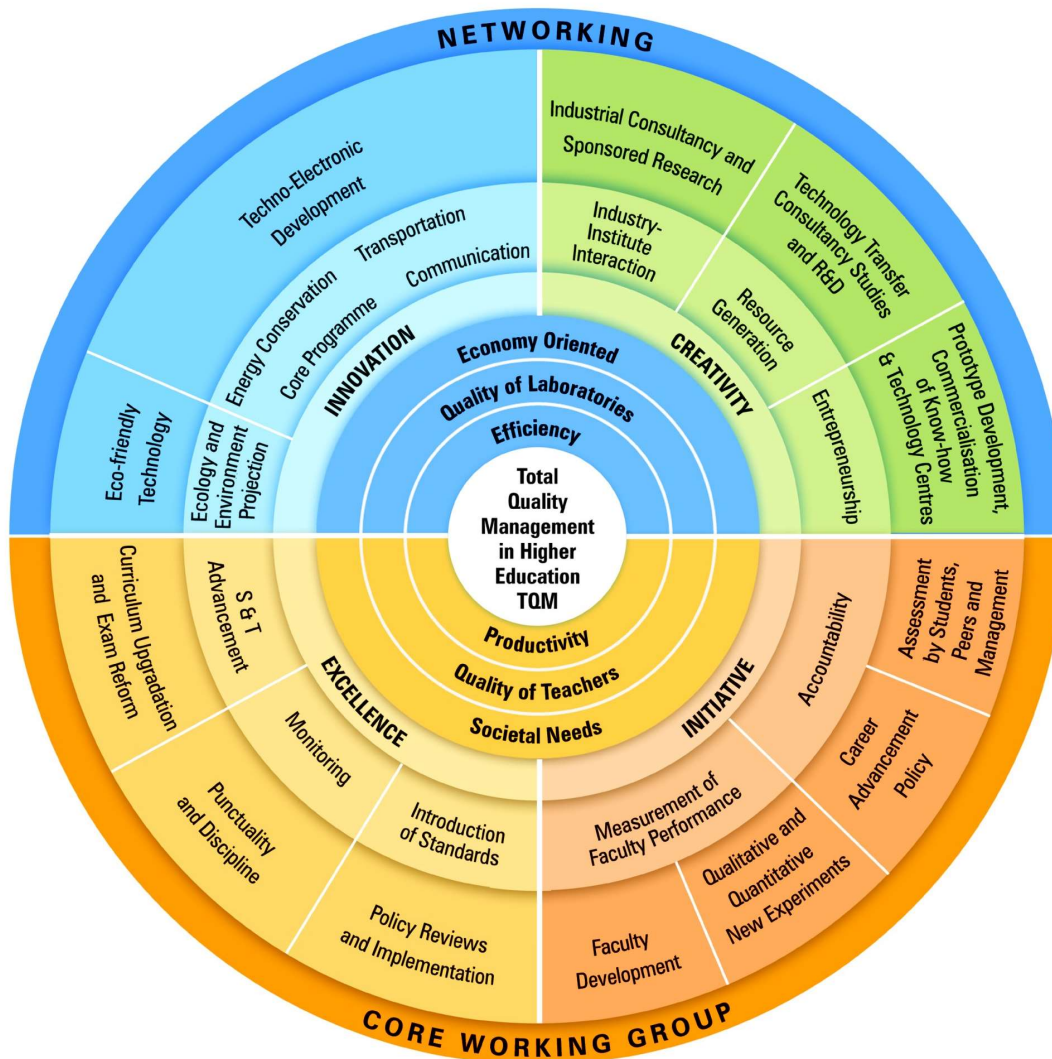


DAYALBAGH EDUCATIONAL INSTITUTE (Deemed to be University)

DIRECTOR'S REPORT

XXXIX CONVOCATION
January 22, 2021

Conceptual Model of Total Quality Management (TQM) Framework of D.E.I.



"The D.E.I. Education Policy is an innovative, comprehensive and flexible higher and technical education policy with the mission objective of evolving a "complete man" (total quality person), which conforms to the concept of total quality management and is geared for transformation of India to a knowledge society."

Most Revered Professor P.S. Satsangi Sahab
Chairman, Advisory Committee on Education, Dayalbagh

XXXIX CONVOCATION

DIRECTOR'S REPORT

COVID-19 and Dayalbagh Educational Institute (DEI)

*The secret of change is to focus all of your energy,
Not on fighting the old, but on building the new.*

--Socrates

The foundational document of the Dayalbagh Educational Institute is the DEI Education Policy of 1975. The Policy, which consolidates the *Dayalbagh Philosophy of Education* first outlined in 1818, provides a blueprint for physical, mental and spiritual development through a holistic model that blends *Para-* and *Apara-Vidya*, providing an understanding of the functions and processes of both, the outer macrocosmic world and the subtler inner microcosm. The microcosm, with its goal of realization of the ultimate reality, reflects the highest level of education.

Education at DEI begins at the tender age of three weeks, with infants and their parents participating in daily community activities such as working in the agricultural fields. This programme, called the 'Superman Evolutionary Scheme', is open to all children between the ages of 3 weeks and 5 years. Physical and mental development is continuously monitored by doctors and pediatricians using scientific methodologies, and results demonstrate above average development of children in all age groups.

Indian mythology and history are replete with stories of young princes who abdicated palatial pleasures in the pursuit of *shiksha*. The ancient ecosystems of education, whether in the universities of Nalanda, Patliputra and Taxila, or in the forest ashrams of *rishis*, were all-encompassing by nature and not aimed at addressing challenges posed by the physical, macrocosmic world alone. These teachers imparted holistic education, teaching internalities as well as the externalities of life, illustrating conservation, inculcating a frugal mindset and minimalism.

At DEI, we encourage a spirit of selfless service and sacrifice for the larger good, and a frugal, Earth-friendly approach to life. Practical, cost-effective solutions promote safety, security and healthy, sustainable practices. Our education blends ‘magnification’ which is the development of subtle levels of the inner (microcosmic) self, and ‘scaling-up’, which refers to processes in the physical world (macrocosm) that lead to profit and pleasure. The prime mover in magnification is the quest for deeper meaning in life. It is experiential and its effects are permanent and sustain an individual through life. We cannot magnify unless we contemplate the betterment of self, community and ultimate reality all at the same time. This may be termed ‘true education’. Money, respect and dignity are the driving agents in scaling-up. We run to scale-up academic activities in the name of education, often ignoring magnification, which is its essence. Holistic education at DEI blends both these aspects of personal development, with the maxim ‘*Fatherhood of God and Brotherhood of Man*’ being an overarching guide.

With a fee structure that is the lowest in the country in comparison to the other institutions of higher learning, DEI offers hope to the last, the least, the lost and the lowest. Almost 80% of our students are below the poverty line, and we are immensely proud that nearly 70% of them are girls. Additionally, if a student works for the institute for 2 hours, education comes to him/her at no cost.

The National Education Policy 2020 (NEP) has used a Systems approach to interconnect different stages, programmes and specializations in education. The NEP stresses the role of industry, neighbourhood development, flexibility and freedom for students to pick and choose courses, modules, and types of evaluations. Interestingly, much of what the NEP suggests was implemented long back in DEI, with additional dimensions such as *Para vidya*.

Education@DEI in the time of COVID-19

DEI’s commitment and investment since 2004 in Information Communication Technology (ICT) in education paid rich dividends during the COVID-19 pandemic. With “Be Prepared” as one of its guiding tenets, DEI was braced to weather the storm even before it hit. Ready access to 476 ± 1 centres, 1577 virtual groups on video and 71,000 individuals on audio meant that content created in multiple languages in hard and soft forms could be easily and quickly distributed among students. Extensive use of various

Virtual Classroom platforms since 2004 gave us the edge in adapting to the challenges posed by lockdowns without any loss of time and quality. Also handy in the initial phase of academic activities were supervised, on-line open-book and take-home exams and Daily Home Assignments that are part of DEI's evaluation system.

Admissions too, proceeded as scheduled even under the new normal: DEI managed almost 40,000 applications for 4000 seats across all its programmes and courses through online, supervised entrance exam, followed by interviews. The Institute delivered education practically at the doorstep of its students, following norms of supervised online education without any misuse of ICT.

The pandemic cast an unflattering light on the harsh asymmetries in our society. The plight of migrant workers, loss of employment and loss of life brought deep pain and uncertainty to our lives. DEI came forward to offer skilling programmes to applicants who could not get admission in regular academic and skilling programmes. Graduate students who could not get admission were given stipends against work done in DEI's agriculture farms, and for other activities. DEI's programmes for village development, start-ups, Digital India, and empowerment of women, SC and ST continued at the same pace as before COVID-19 struck.

One of the global impacts of COVID-19 has been universal adoption of Work From Home (WFH). This has resulted in a paradigm shift psychologically as well as physically, as interaction moved from in-person to virtual mode. Prolonged confinement has had a deep impact on mental states of people. A new kind of 'virtual society' has come into being, with on-line meetings, seminars, workshops and conferences becoming the norm, changing the way people and businesses conduct operations. With marketplaces shifting to the virtual world, e-commerce has become mainstream. The pandemic has conclusively demonstrated how people can benefit through minimalism, conservation and innovation in life and work.

The Need for Modern Sustainable Healthcare Habitats

The COVID-19 pandemic has brought into focus the necessity and importance of developing sustainable 'healthcare-habitats'. Such habitats, directed towards the well-being of people and the community, already exist in Dayalbagh and DEI Integrated and hybrid medical practices, maintenance and daily monitoring of air and water quality, the

use of renewable energy, electric vehicles, tree plantation, air pollution control through water misting, etc., all contribute significantly to good healthcare practices. The best summing-up of our efforts and plans is provided by Prof. P.S. Satsangi Sahab, the Chairman of the Advisory Committee on Education (a non-statutory body) -- think-tank for consensus building of Dayalbagh Educational Institutions). I quote his words verbatim as under:

“In the context of our effort to develop from heritage status of district of Dayalbagh in sharing the Wonders of the World which include the Samadh of Param Purush Puran Dhani Soamiji Maharaj as well as Taj Mahal regarded as one of the Wonders of the World, which have been appreciated and handed over to us by our age-old society all over the world. In this meeting, arising from such debate on the occasion of our first independent execution of Dayalbagh Science of Consciousness in co-operation with the entire globe in coping with the challenge posed by COVID-19 as a pandemic for the entire world throwing world-wide economies in doldrums. That part to be shown now, so that you may get a flavour of what activities we have been testing in education as imparted by Dayalbagh Educational Institute (Deemed to be University) including the full span of education from maternity to eternity, from infants to the great masters of developed world. Often this race has been perceived as making a transition from developing status to highly developed world in the West. In the past, it meant there was a considerable importance given to education in our framework as represented by institutions like Nalanda and Pataliputra which had attracted scholars from all over the world. This has left an indelible imprint for the developed countries to, as I said a while ago, that pandemic has posed a great challenge and, in this context, you see some of the measures taken by DEI. Earlier, in cooperation with the outfit run by Prof Stuart Hameroff at Arizona notably in cooperation with the recent Nobel Prize winner Prof Roger Penrose from Oxford and what we now stand for, which we consider that instead of picking a modern, mobile, smart and resilient society, we have opted for modern healthcare habitat and self-defence for the needy particularly young ladies and young children. Now we’ll have an opportunity to see in brief glimpse what DEI is upto and what its far reaching implications are.

In conclusion, I will briefly mention that what we are following is sustainable development and that is the one which will give us a win-win situation all through, and the Radhasoami Faith is not only preaching but practising it in the agricultural field, in

the Dairy compound, in our cottage industries and so on. So, it is a hopeful situation that the universe will come to its final awakening in due course of time.”

On 19th September, 2020, DEI hosted an interaction with Mr. Sam Pitroda, widely acknowledged as the Father of India's Computer and IT Revolution. Overwhelmed by the DEI's commitment to academic activities even during the crisis caused by COVID-19 pandemic, Mr. Pitroda's spontaneous appreciation is worth quoting. He remarked: "There should be a DEI in every district of India". On 23rd September, 2020 similar sentiments were expressed by the former Deputy Governor, RBI, Prof. Viral Acharya, currently Professor of Economics, NYU Stern School of Business: "Eco-system works not only on education of children at the last mile but also works on vocational training. It is something that I have always felt necessary to meet the needs of employment for the Indian youth".

It is worth mentioning that the Dayalbagh and DEI perspective and culture is embedded in its unique lifestyle that has been evolved according to the needs of the changing times but never at the cost of certain basic elements that remain immutable even in the face of changes elsewhere. The philosophy of "Waste nothing" has always remained cardinal to our lifestyle that aims at reducing wasteful consumption of all-natural resources viz., energy, water, food and in short, all resources. It is through this way of living we curate and scale up DEI-CUM-Dayalbagh MODEL OF Sustainable modern healthcare habitat and self-defense. With given multiple choices, at DEI, we take the golden mean path which helps in sustainable development and is also in consonance with what Dr. Sam Pitroda reflected in his remarks on the activities of DEI and its educational framework.

Agriculture, Consciousness and Entrepreneurship

Agriculture, Consciousness studies and Entrepreneurship are the three thrust areas of DEI. These areas link up past with future, frugal engineering with cutting-edge technologies, tilling, toiling (using one's hands) and tinkering with higher-order, sophisticated thinking. A healthy body and mind, practices such as ultra-transcendental meditation lead to inner well-being and a stress-free lifestyle, enabling progress because of non-interference of negativities.

The Dayalbagh agriculture produce includes grains, fruits, vegetables, flowers and medicinal plants in 1200 acres of land. Agriculture produce during the lockdown period was abundant in quantity and variety. The total Green Fodder yield including *Rabi, Kharif and Ziad* grew to 40184 qts. in 2019-20, which is the highest in comparison to the previous five years of agricultural output. The social work carried out by Dayalbagh community and DEI students, staff and faculty members not only contribute to healthy lifestyle but also to food security, healthcare and selfless services to mankind. The Dayalbagh community's schedule of twice-a-day agriculture fields activity along with congregational prayers open to all, has considerably helped the members of the community not only in maintaining their physical health and mental alertness but also in enhancing their consciousness awakening, inner peace and a spirit of optimism in life.

Gaushala, another pillar in the process of sustainable development of DEI and Dayalbagh, has about 1100 cows. In the last 10 months the average milk production has been 1,465 litres per day with a peak also of 1,957 litres. The gaushala milk is consumed by the community and DEI Dairy. The Dairy has pasteurizing, homogenising, testing and packaging facilities for milk and milk products. DEI's dairy products with value addition like flavoured milk, butter, chocolates, ice-cream, fudges, truffles, *basundi, burfi, hot-milk, curd, ghee, shrikhand* and many others are manufactured afresh every day. Nothing stops the dedicated spirit of service, and even in the face of the COVID-19 crisis. 698 liters of milk has been processed in a single day and 180 liters on daily basis in DEI Dairy. Similarly, 232 liters tea were made for distribution to field workers in a single day and 110 liters on daily basis. ``On an average 6000 liters of milk and 3500 liters of tea have been processed in a month during the pandemic. The butter production has gone up to 4000 cakes of fifty grams per week.

AIR and WATER QUALITY Monitoring and Assessment at Dayalbagh

“At Dayalbagh we have a Modern Health Care Habitat with provisions for health security and personal security with built-in self defence mechanism”. This objective is achieved through SIGMA SIX Quality, Values and Attributes wherein Water and Air Quality are monitored regularly at Dayalbagh.

Air Quality

Regular Monitoring of PM₁₀ and PM_{2.5} is being done using GRIMM Spectrometer at six different locations in the campus.

Air Quality Index (AQI) is calculated on the basis of globally accepted United States Environmental Protection Agency (USEPA) Model. It is a pleasure to inform that in comparison to Agra City (Sanjay Place) we are most of the time in **MODERATE** and sometimes in **SATISFACTORY** category of AQI. This is achieved by following initiatives:

- (i) Misting (with fine water droplets) is done four times a day to combat pollution.
- (ii) Restricted movement of vehicles (Petrol and Diesel) is rigorously observed in Dayalbagh and commuting through public electric vehicles is encouraged.

On account of good air quality maintained minimal ill effect has been observed on Human Health. Positive correlation has been observed between PM_{2.5} levels and number of COVID-19 positive cases. Low number of COVID-19 positive cases could be attributed to use of masks, helmets and hand sanitization from January 2020 itself as an integrated response.

Under Multi-Institutional pan India study ISRO Geosphere Biosphere Programme has equipped DEI with On-line analysers for Ozone, NO_x, and CO which have recording ambient levels every 5 minutes 24x7, 365 days since 2009.

Water Quality

The Institute is also involved in testing quality of drinking water to ensure the supply of clean and safe water to residents and students.

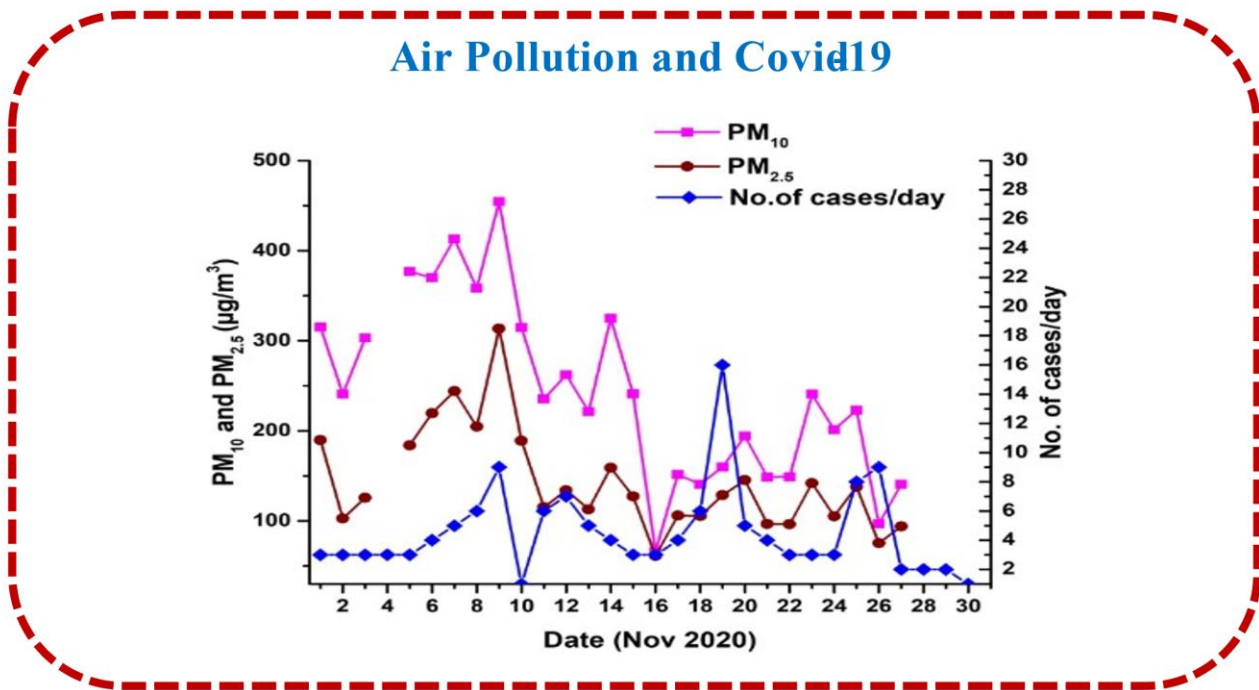
- ❖ Potable water from all the wells (10 in number) is monitored every week to ensure that the water does not contain coliform bacteria.
- ❖ Subsequently, wells are treated with Potassium Permanganate to maintain zero or permissible number of coliforms.
- ❖ Chlorine and Potassium Permanganate levels of the wells are monitored daily.

This enables the residents of Dayalbagh to consume water from wells without passing it through RO plant thus saving a large amount of water.

Chemical parameters (Dissolved Oxygen, Chloride, Hardness, Total dissolved Solids) are also monitored fortnightly.

Dayalbagh has given land to the Govt. of Uttar Pradesh at nominal rate for sewage treatment plant (STP) with an understanding that the treated water will be used for irrigation of agricultural fields at Dayalbagh so that water table in well waters is maintained.

STP water is also tested weekly to check Biochemical Oxygen Demand (BOD) and Chemical Oxygen Demand (COD).



Organic farming has always remained the hallmark of our system of agriculture, and during COVID-19 it has been intensified further for growing more vegetables for the community to avoid any kind of contamination. Biomass is utilized for composting and energy production. The agricultural dead plants and cow dung are regularly utilized to serve this purpose. Water dispensed from Gaushala is utilized for farming of vegetables under the Solar Agriculture farming initiative and green house cultivation.

Development of bio-diversity parks and agriculture fields proved to be a boon: the wide and open spaces provided excellent platforms for teaching and working in Lab-on-Land activities while maintaining social distancing and other precautions. Outdoor self-defense physical training provided a huge sense of personal safety and security.

Innovation leads to development. The integration of UV light sources and sanitizers provided a three-dimensional impact in the sanitization of classrooms and offices. The use of masks to cover mouth and nose and wearing of helmets became mandatory for the prevention of COVID-19. It may be noted that these practices and sanitization processes started in DEI in the month of December 2019, much before the pandemic struck! DEI-associated Self-Help Groups (SHG) and village development activities under Apparel & Toys Manufacturing Association (ATMA) fulfilled the need for masks for the community and the Institute. DEI is a successful participant of TEQUIP III programme and DST Mission Innovation Projects. All through the COVID-19 pandemic, Institute activities continued uninterrupted.

Achievements and Awards during the pandemic

DEI faculty and students participated in the MIT hackathon 'COVID-19 Challenge- India: Turning the Tide' and won several awards and recognitions.

A team led by Prof. K Soami Daya won this award in Track E. Mr. Ashish Kumar won in Track B, Mr. Prateesh Kumar and Ms. Amolly Gupta won in Track J.

Self-Help Groups based in the tribal areas of Madhya Pradesh were awarded a contract to stitch uniforms for schools by the local government.

Master's programmes were started in Business Incubation, and B.Tech in Agriculture Engineering.

DEI also signed several MoUs with national and international institutions/universities, organized the bi-annual Dayalbagh Science of Consciousness Conference on May 22, 2020 and January 01, 2021, conducted webinars and organized lectures by several distinguished speakers.

All in all, the pandemic gave us a deeper appreciation of our lifestyle and model of education. DEI's commitment to the growth and empowerment of our students—physical, mental, ethical, emotional, and spiritual remains as deep and energetic as ever.

DEI: SOME FACTS AND FIGURES

FROM THE ACADEMIC YEAR 2020-21

Five Self-Help Groups registered with the M.P. State Rural Livelihood Mission at Rajaborari Estate produced more than 10,000 masks for use during the pandemic; they have received an order from MP's Rajya Shiksha Kendra to produce 9400 uniforms for 61 schools. Two Self-Help Groups at Agra are producing more than 6000 double layered masks to fulfil orders from corporate companies. Throughout the pandemic, DEI distributed masks to tribal villagers, doctors, health care workers, police and students.

New Academic Programmes

- ✓ The following new programmes were introduced in the session 2020-2021.

Faculty of Commerce - M.Com. (Corporate Accounting and Law)

Faculty of AYUSH –

- Companion/Help for aged and infirm
- Advanced Certificate - Nursing Aide

Faculty of Social Science -

- MBA General Management
- MBA Innovation, Entrepreneurship and Venture Development
- BA Social Sciences (Transdisciplinary Programme)

Faculty of Engineering –

- B.Tech. Agriculture Engineering

Five B.Voc. Programs have been approved and are likely to begin in the next session.

Faculty Awards and Recognitions

- ✓ Two Professors of DEI have been placed in Top 2% in World Ranking of Scientists-2020, Prof. V. B. Gupta in the field of Polymers and Prof. Sukhdev Roy in the field of Optoelectronics and Photonics.
- ✓ Prof. K. Hans Raj, Faculty of Engineering was nominated by DRDO as the Chairman for Peer Review of “Design and Development of Inflatable Radome – Mk-II (Infradome)”.
- ✓ Prof. Sanjay Kumar Srivastava, Faculty of Engineering, received a letter of appreciation for developing MOOCS in the subjects of Biomedical Engineering by NPIU, MHRD, GOI.
- ✓ Dr. Sonali Bhatnagar, Faculty of Science, was awarded Young Scientist Award for Women in Science. She was also awarded “Best Paper Presenter” award in 1st International Conference on Advances in Mathematics, Science and Technology (ICAMST-2020).
- ✓ Dr. K Pritam Satsangi, Faculty of Engineering, was adjudged the Best Researcher in Solar Energy under International RULA (Research Under Literal Access) Awards 2020. He was also awarded the Young Scientist Award 2020 under 8th International Scientists Awards on Engineering, Science and Medicine.
- ✓ Prof. Neelu Sharma, Faculty of Arts, received 'Academy Puruskaar 'in Tabla Vadan from Uttar Pradesh Sangeet Natak Akademi, Lucknow, and has been nominated as a Member of National Kathak Institute, Lucknow.
- ✓ Dr. Anil Kumar Dwivedi, Principal DEI, REI Intermediate College, Agra was awarded the Academic Excellence Award-2020 at Hindustan College of Science and Technology.
- ✓ Dr. Purnima Bhatnagar, Faculty of Social Sciences, has been nominated as a DEI Innovation Ambassador, registered with the Institution Innovation Council - MHRD Innovation Cell. She has also been trained as a Climate Reality Leader, under former US Vice President, Al Gore in 2020.
- ✓ Prof. Sanjay Bhushan was ranked in Top 10% of International Authors by Elsevier-SSRN, Elsevier Inc., USA in Year 2020.

- ✓ Prof. Shalini Dubey, Prof. Archana Kapoor, Dr. Rajeev Kumar Chauhan, and many others were invited as Resource Persons/Invited Speakers/Subject Expert/Consultant in various academic activities.

Student Achievements

- ✓ Five cadets Pranay Pratap Singh, Ritesh, Aman Kumar, Raj Kumar and Vans Solanki have been selected for the Republic Day Parade. Two DEI alumni cadets Rahul Tyagi, and Indrajeet Sikarwar have joined the Indian Army through NCC Special Entry scheme.
- ✓ Aashna Suri stood second in Classical Vocal, an event organised by Uttar Pradesh Sangeet Natak Akademi, Lucknow.
- ✓ Mahima Sinha was felicitated with the “Young Artists” Award by Amir Khusro Sangeet Academy in Chennai.
- ✓ Isha Goyal received the ‘Best Paper Award’ at the International Conference on Innovation and Opportunities in Chemical Engineering for Sustainable Environment and Energy 2020.
- ✓ Mebin Panamkuttiyel Saumain, BSc II Year, published a single author paper in International Journal of Mathematics Trends and Technology (IJMTT) Volume-66, Issue-1,2020.
- ✓ Vartika Sharma won the 3rd Prize in the Sahyadri Young Ecologist Awards in the 12th Biennial Lake Conference organised by the Indian Institute of Science, Bangalore.
- ✓ Rishabh Singhal stood 1st in the “Quantum Winter Hackathon 2020”.
- ✓ Palak Taneja was awarded Best Poster Presentation in the Winter Session of Dayalbagh Science of Consciousness.
- ✓ Priyanka Yadav, Kamakshi Nagaich, Niharika Singh and Pranjal Jain won prizes in Essay writing, Poetry competition, Teacher’s Day Best Message competition.

Research and Development Publications

- ✓ During the session 2019-2020 the faculty and scholars have published 180 research papers in national and international journals, 22 book chapters and 5 books including an e-book (Kindle Edition).
- ✓ An International Journal of Advanced Manufacturing Systems (IJAMS) was launched on the DEI website.

Conferences, Webinars, Seminars, Workshops organized in online mode

- ✓ A Webinar on ADOBE Spark was organised on 30th April 2020 by the School of Education.
- ✓ The Internal Quality Assurance Cell (IQAC) and the School of Education in collaboration with ELSEVIER organised One-Day Online Workshop on the theme entitled 'Enhancing Research Communication Skills through Science Direct and Mendeley' on May 3, 2020.
- ✓ A Webinar on Online Teaching Platforms was organized on May 7, 2020 by Faculty of Education.
- ✓ The 2nd International Conference on Dayalbagh Science of Consciousness (DSC, 2020) was organized in virtual reality mode at University of Waterloo on May 22, 2020.
- ✓ A Two-Day National Online Workshop on 'Cognitive and Meta Cognitive Strategies of Knowledge Acquisition' was organized on 2nd and 3rd June 2020 under the patronage of School of Education, Faculty of Education.
- ✓ A Webinar on "Climate, Health and Sustainability" was organized by Department of Chemistry, on 4 June, 2020 on the eve of World Environment Day.
- ✓ Webinar on "Boosting Immunity through Yoga to Fight COVID -19" was organised on the occasion of The International Day of Yoga (June 21, 2020) by the Applied Science and Humanities Department, D.E.I. Technical College.

- ✓ A 2-day National Webinar on Financial Services Industry & Cyber Security was organized on 22-23 August, 2020.
- ✓ An e-lecture on the topic “Food Fortification” was organized to celebrate National Nutrition Week by Food Processing & Preservation, Department of Home Science on September 7, 2020.
- ✓ On the occasion of 53rd Engineer’s Day a webinar on "The Role of Engineers in COVID-19" was organized at DEI by the Student Chapter IEI, Kolkata on 15 September, 2020.
- ✓ A Panel Discussion was organized on September 19, 2020 including Mr. Sam Pitroda and other globally renowned experts.
- ✓ World Food Day was celebrated by Food Processing & Preservation, Department of Home Science on October, 21, 2020.
- ✓ A Distinguished Lecture by Prof. Viral V. Acharya was organised on September 23, 2020.
- ✓ DEI’s Innovation Council, conducted third phase of a one-day Innovation and Entrepreneurial workshop PITCHERS-3 for new innovators and entrepreneurs of DEI on September 26, 2020.
- ✓ A 2-day international workshop on Self Health Care and Yoga was organised on 20-21 October, 2020 by Faculty of Education.
- ✓ The Department of Drawing and Painting organized a 5-day online Faculty Development programme on Mural Arts from 6th -10th October 2020, and a 5-Day AICTE Training and Learning (ATAL) Faculty Development Programme on Painting from 27th to 31st October 2020 in online mode.
- ✓ The DEI Institute Innovation Council conducted a 1-day workshop entitled “The Story of an Entrepreneur,” on November 1, 2020.
- ✓ The Seventh Annual 'Values and Quality Day' was celebrated on 14th November, 2020 with live proceedings being transmitted in virtual and supervised mode through Zoom and DEI Multimedia YouTube links.

- ✓ A 2-day online workshop on 'Integrating Drama in Teaching-Learning' was organised by School of Education, Faculty of Education on 29-30 December 2020.
- ✓ A webinar on 'Data Analysis Using Statecraft' was organized by the Dept. of Sociology and Political Science, in collaboration with STATCRAFT, Bengaluru on 17th August, 2020.
- ✓ Training and Placement Cell of the Faculty of Social Sciences organized a webinar on "Using rigorous evidence for Education Policy" in joint collaboration with Ms. Megha Pradhan, Senior Policy and Training Manager, J-PAL (Abdul Latif Jameel Poverty Action Lab), South Asia as well as Ms. Namitha Sadanand, Senior Policy and Training Association, JPAL.

Conferences, Seminars, Workshops Organized in Conventional (non-virtual) Mode

- ✓ A 2-day workshop on Fundamentals of Artificial Intelligence in Education was organized by the Faculty of Education on 24-25 January, 2020.
- ✓ The Department of Drawing and Painting organized a 7-day workshop on Painting with eminent Russian artist Mr. Victor Safranov from February 24 to March 1, 2020.

Participation in Conferences/Seminars/ Workshops/Webinars and Faculty Development Programmes

The faculty, research scholars and post graduate students participated and presented papers and posters in more than 100 International and National Conferences, Seminars, Webinars and Workshops and have also been conferred with best paper/poster awards.

- Patents

A patent has been granted to Dr. B.P. Saini, Dr. G. Singh and Dr. G. Das of the Faculty of Engineering for their invention of Ergonomic Three-Seater Wooden Sofa Design (Registration Number: 331907-001, Class: 06-01, Granted on October 9, 2020). 9 more patents were filed during the current session.

- Research Projects and Fellowships
- ✓ DST Mission Innovation R&D project

The DST Mission Innovation R&D project is a collaborative effort of D.E.I., IIT Roorkee and University of Tromso, Norway that envisages multi-pronged RD and demonstration of Solar Agriculture Farm Ecosystem (SAFE). The project has been raised to contribute to the Government's two major targets by the year 2022, i.e., to increase the capacity of solar power plants to 100 GW and to double the income of farmers. The major takeaways of the project include the following:

1. Solar-Agriculture Farm with multiple land-use to increase the farmer's income.
 2. Hybrid AC/DC Smart Microgrid for integration of diverse renewable energy resources with utility grid and rational end use of renewable energy in the microgrid Development of solar powered value chain machinery for agriculture and dairying for empowering farmers.
- ✓ Ministry of New and Renewable Energy has sanctioned Rs. 2.0 crore for the installation of Field Emission-Scanning Electron Microscope (FE-SEM) to the Department of Chemistry.
 - ✓ A Consultancy Project was sanctioned to Prof. K. Hans Raj by ADRDE (DRDO) for ₹9,93,300.
 - ✓ AICTE has sanctioned a Research Project under RPS scheme of ₹18,00,000 for three years to Dr Ankit Sahai and Prof. Rahul Swarup Sharma
 - ✓ AICTE has sanctioned ₹14,34,000 to K. Hans Raj of Department of Mechanical Engineering under Modernization and Removal of Obsolescence (MODROB)
 - ✓ A DST R&D Project titled "Diverse Energy Vectors Integration for Energy Storage" was awarded to Prof. G. S. Sailesh Babu (PI), Prof. D. Bhagwan Das (Co-PI) and Prof. A.K. Saxena (Co-PI) by The European Joint Programming Platform ERA-Net Smart Energy Systems and the global Mission Innovation Initiative.
 - ✓ A project titled "Smart Energy Management System for Solar-Hydro-Battery based Microgrid to Empower Future Low-Carbon Indian Society" under UGC Start-Up Grant, Govt. of India was sanctioned to Dr. Rajeev Kumar Chauhan.

- ✓ DEI undertook 55 sponsored research projects worth ₹. 28.78 crore sponsored by DST, MHRD, UGC, ICSSR, Ministry of Textiles, ISRO, MNRE, DBT, AICTE and UPSDM, AICTE, Ministry of Tourism. 164 students are receiving fellowships in the form of JRF, SRF, PDF and Inspire Fellowships from these agencies. Several Projects submitted under FIST, Schemes under the Tribal Sub-plan and Women Technology Park (SEED Division, DST), Kiran Fellowship were shortlisted and presentations have been made.

MoUs/Collaborations/Agreements/Exchange Programmes

- ✓ DEI and CSIR-Indian Institute of Toxicology Research, Lucknow signed a Memorandum of Understanding (MoU) on 17 February, 2020.
- ✓ DEI and The University of Edinburgh, Scotland, UK signed a Memorandum of Understanding (MoU) on November 3, 2020.
- ✓ DEI entered into an agreement with Fiji National University, Fiji on March 13, 2020 to innovate, adopt and adapt technology for taking education to the doorsteps of most marginalized and impoverished communities.
- ✓ DEI is expanding an online exchange program with the University of Hong Kong including students from our semi-urban and rural campuses of Timarni and Rajaborari.
- ✓ DEI and The School of Planning and Architecture, New Delhi have mentored for joint development of case studies on the Taj Trapezium Case, Privatisation of New Delhi Airport, Privatisation of Power in Agra, and the Green Belt in Agra.

Partnership with the Government and its Agencies

- ✓ DEI is playing the leadership and coordination role in the design and implementation of the Code India initiative.
- ✓ DEI with its collaborating partner Michigan State University has published the report on a longitudinal study on automated identification of neonates and infants.

Budget

During the financial year 2019-2020 the Institute received ₹ 4849.11 lakh as Maintenance Grant from UGC and ₹ 61.17 lakh as UGC Deen Dayal Upadhyaya (DDU) grant and ₹. 588.62 lakh as Capital Assets and Revenue. The UP Government sanctioned a grant of ₹ 1922.54 lakh as Regular Salary Grant and ₹10.28 lakh for NSS. The income from investment from non-government sources amounted to ₹ 732.27 lakh. The Unit Cost was ₹ 89,585/- (without salary). Total budget of the Institute for the year 2020 - 2021 was ₹ 128.48 crore out of which ₹ 9.72 crore have been spent on Infrastructure. Infrastructure Budget for TEQIP grant as on April 1, 2020 was ₹ 1.62 crore out of which ₹ 1.43 crore has been spent.

Other Activities

- ✓ The Annual Drama Festival of DEI was organized from 24-26, February 2020 jointly by the Departments of English Studies, Hindi and Sanskrit.
- ✓ World Environment Day 2020 was observed by Volunteers, Staff and Officers of NSS Cell of the Institute in virtual mode.
- ✓ Teacher's Day was celebrated on 5th September, 2020 in the virtual mode.
- ✓ DEI observed the 151st birth anniversary of Mahatma Gandhi on 02 October, 2020. The Chief Guest of the programme was Dr. Hariom, IAS (Secretary, General Administration and Government of Uttar Pradesh) and Special Guest was Mr. Sunil Vajpayee, IRS (Commissioner of Income Tax, Agra).
- ✓ Values and Quality Day was celebrated on 14th November, 2020 in Virtual and Supervised mode.
- ✓ Winter Camps including NSS Special Camp, Unnat Bharat Camp, Winter Training Camp and Scouting and Guiding Camp and Ecology Awareness Camp with SPHEEHA were organized simultaneously from 20-31 December 2020. The five camps were inaugurated jointly by Shri Nikhil T Munde, the Municipal Commissioner of Agra.

- ✓ January 1, 2021 was celebrated as *Shiksha Diwas* and Dayalbagh Science of Consciousness Day.
- ✓ Institute Innovation Council and National Innovation Start-up Policy Implementation Cell of DEI was launched at DEI.
- ✓ DEI Schools have started a Teachers Colloquia as an initiative for Staff development. The first Colloquia was held on June 15, 2020 and the tenth was organized on December 5, 2020.

New Infrastructure and Facilities

- ✓ Solar-Agriculture Farm

A 200 kWp Solar Power Plant has been installed on elevated structures so that it facilitates solar as well as agricultural farming. The solar power generated would be used for electrical loads in the Dairy complex and nearby places viz., Gaushala, X-Ray Centre, Dairy Workshop, irrigation load in Dairy, i-c-n-c TALL, Crèche, Prem Vidyalaya, DEI Girls Hostel, DEI Food Processing Lab etc.

- ✓ Hybrid AC/DC Smart Microgrid

A Hybrid Micro Grid consisting of coexisting ac and dc sub-grids has been developed by having remote monitoring, diagnosis and control of the generation and loads for efficient and easy operation.

- ✓ Solar-Powered Value Chain

Solar powered machinery viz. electric thrashers, electric boilers for milk pasteurization, DC compressor based efficient chiller/cold storage, etc. have been developed at the Dairy and food Processing Labs. An e-vehicle has been developed for transporting the agricultural produce (vegetables) with solar powered charging support from the plant. A multi-purpose mobile solar power plant of 5.5 kWp capacity is also being developed in the project.

- ✓ Dayalbagh Educational Air Shower Array (DEASA)

The Institute under the research division of Mathematics and Life Sciences funded the setting up of Dayalbagh Educational Air Shower Array (DEASA).

✓ Polyhouses and Herbal Garden

Two polyhouses have been erected to facilitate protected cultivation and for the purpose of acclimatization and protected cultivation. Herbal Garden which houses medicinal plants and vegetables has been established over an area of 4 acres.

The DEI ICT Centre Timarni has established a fully functional Bamboo Workshop under a 5-year formal MoU jointly funded by the Bamboo Development Agency, Harda (Forest Division Harda).

✓ Infrastructural facilities worth ₹.5.74 crore were procured and installed across the Institute during this period.

Placement and Progression

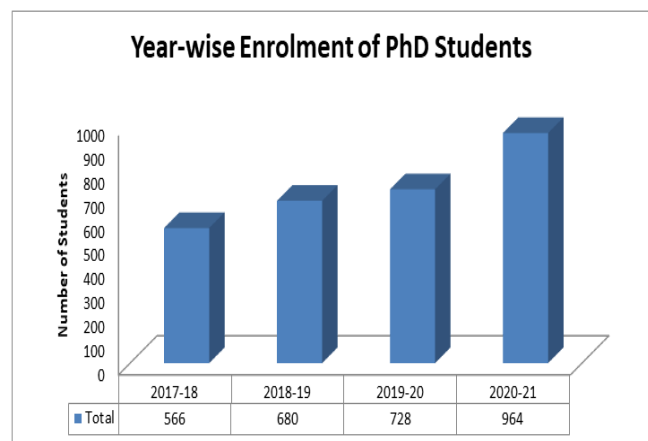
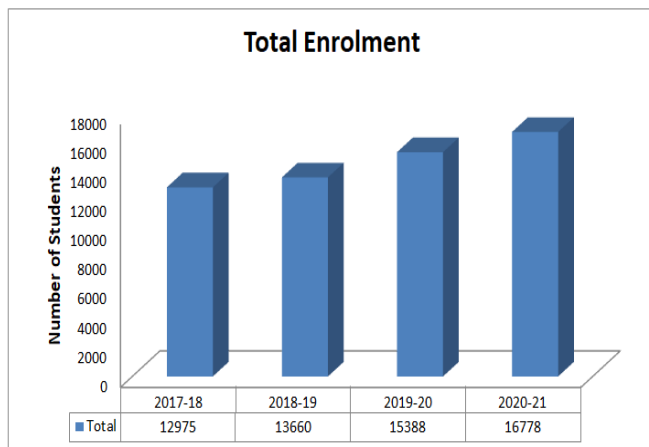
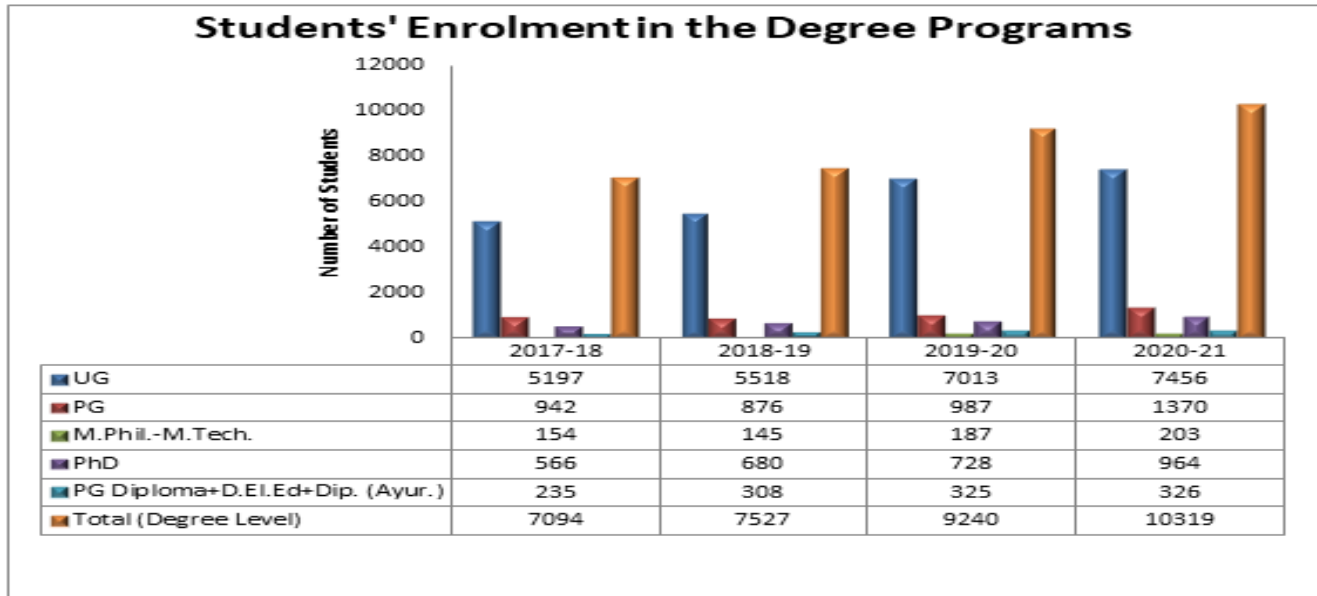
Students of Professional and Certificate Courses were placed in leading companies like Tata Motors, Napino Auto & Electronics Ltd., Genpact Headstrong, Infosys, Cadence etc. while students graduating from B.Ed., PG and PhD were recruited in various schools, colleges and Institutes like IIT Jodhpur, DEI, Bihar Public Service Commission and R&D Labs. The students of Vocational Courses also were well placed. 71% of MBA students were placed in companies like BYJUS, Abbott Labs, Nielsen India, Ernst & Young, Varun Beverages, Essar Steels, mFizlterit etc. The recruitment for the present batch continues to be in progress.

Some Distinguished Visitors

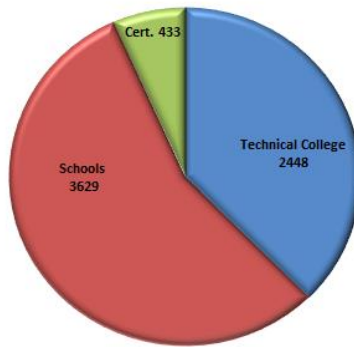
- ✓ Prof. Rama Shankar Singh, Finance Officer, B R A Central University, Lucknow, visited the Institute on the occasion of Research Fair organised on January 11, 2020.
- ✓ Shri Vibhuti Narayan Rai, IPS, (Retd.) and Ex-Vice Chancellor, M.G.A.H Vishwavidyalaya, Wardha visited the Institute as the Chief Guest on the 71st Republic Day (January 26, 2020).
- ✓ Prof. Spenta Rustum Wadia and his wife Dr. Leena Chandran Wadia visited the Institute from February 27 to March 2, 2020 and delivered the Diamond Jubilee Memorial Lecture on "Black Holes: Beacons in Our Search For A Quantum Theory Of Space –Time And Gravity" on February 29, 2020.

Student Enrolment

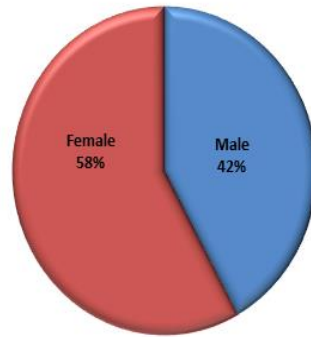
In the current academic session (2020-2021) the students' enrolment in the Regular, ICT and Open/Synchronous Learning Centres is 16,778 with an increase of 9% from the previous session. A graphical distribution of students' enrolment is depicted below.



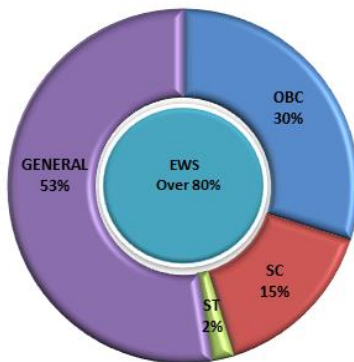
Students' Enrolment in Non-University Programs 2020-21



Gender-wise Students Enrolment in Degree Level Programs

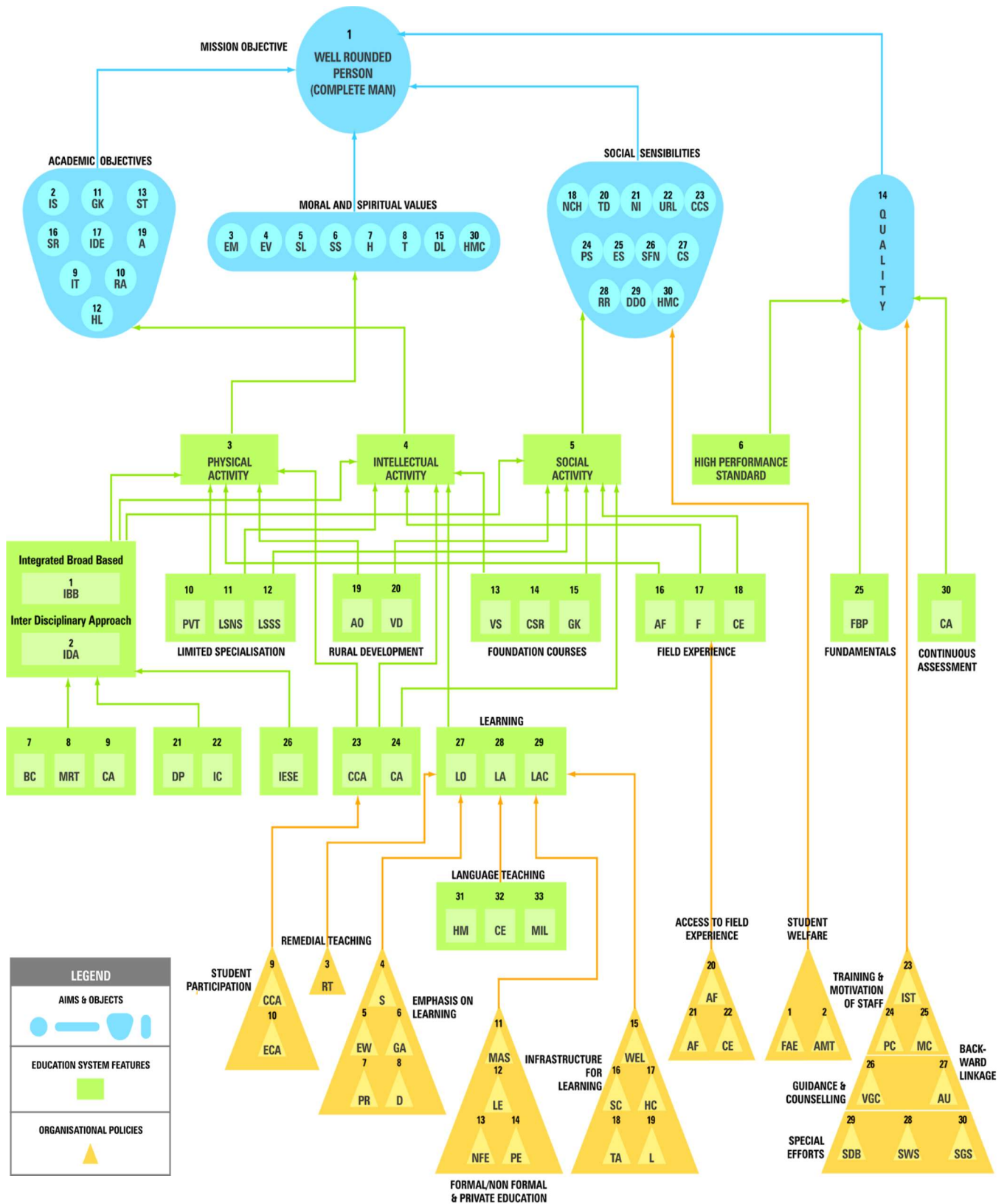


Category-wise Enrolment in Degree Level Programs



- In this Convocation 70 PhD degrees are being awarded.

HIGHER EDUCATION POLICY SYSTEM (INTERPRETIVE STRUCTURAL MODEL)



LEGEND

I AIMS AND OBJECTS

1. Well-rounded Person
2. Intellectual Strength
3. Emotional Maturity
4. Ethical Values
5. Simple Living
6. Selfless Service
7. Humility
8. Truthfulness
9. Independent Thinking
10. Reasoning Ability
11. General Knowledge
12. Habit of Learning
13. Scientific Temper
14. Quality of Education
15. Dignity of Labour
16. Self Reliance
17. Inter Disciplinary Exposure
18. National Culture & Heritage
19. Aptitude
20. Tolerance for Diversity
21. National Integration
22. Understanding Rural Life
23. Class-less and Caste-less Society
24. Political System
25. Economic System
26. Social Forces & Needs
27. Civic Sense
28. A Respect for Rights
29. Duties & Discharge of Obligations
30. High Moral Character

II EDUCATIONAL SYSTEM

1. Integrated & Broad Based
2. Inter Disciplinary Approach
3. Physical Activities
4. Intellectual Activities
5. Social Activities
6. High Performance Standard
7. Breadth of Coverage
8. Most Recent Trends of Thought
9. Concentrates of Academics
10. Primarily Vocational and Technical
11. Limited Specialisation in Natural Sciences
12. Limited Specialisation in Social Sciences
13. Foundation Courses and Value System
14. Foundation Courses like Comparative Study of Religion
15. Foundation Courses like General Knowledge
16. Field Experience (Work Experience) in Farms
17. Field Experience (Work Experience) in Factories
18. Field Experience (Work Experience) in Commercial Establishments
19. Agricultural Operations
20. Village Developments Programs
21. Democratic Processes in Student Activities
22. Indian Constitution and Other Forms of Government
23. Co-Curricular Activities
24. Cultural Activities
25. Fundamental and Basic Principles
26. Interlinkage between the Educational System and Environment
27. Learning by Observation
28. Learning by Analysis
29. Learning by Acquisition of Knowledge
30. Continuous Assessment
31. Hindi as the Medium of Instruction
32. Competence in English
33. One other Modern Indian Language

III ORGANISATION

1. Free / Affordable Education
2. Assistance through Means Test
3. Remedial Teaching
4. Learning through Seminars
5. Learning through Experimental Work
6. Learning through Group Activities
7. Learning through Paper Reading Sessions
8. Learning through Discussions
9. Students Participation in Management & Organisation of Co-Curricular Activities
10. Students Participation in Management & Organisation of Extra-Curricular Activities
11. Major Academic Subjects
12. Lateral Entry
13. Non-Formal Education
14. Private Education
15. Well Equipped Workshop / Laboratories
16. Science Centre
17. Hobby Centre
18. Teaching Aids
19. Library
20. Agricultural Farms for Field Experience
21. Small Scale Industries for Field Experience
22. Commercial and Service Establishments for Field Experience
23. In-Service Training Programmes & Orientation Courses
24. Adequate Physical Conditions for Motivating the Teachers
25. Adequate Mental Climate for Motivating the Teachers
26. Vocational Guidance and Counselling of the Students
27. Attachment of the School to a University Level College
28. Special Efforts to Overcome Handicaps of Weaker Sections
29. Special Efforts to Overcome Handicaps of Disadvantaged Background
30. Special Care to the Gifted Students

