Background: Dayalbagh & its philosophy

The Dayalbagh Educational Institute (DEI) is situated in the tranquil environs of Dayalbagh, an ashram which was established in 1917 and from which its name derives. Dayalbagh is the headquarters of the Radhasoami Satsang, which was established in 1861. The faith follows the philosophy of *Sant Mat*, and centres around a living preceptor (*Sant Satguru*).

DEI's unique approach to education can be best appreciated by placing it in the context of its moorings: the physical world of the Dayalbagh community, the thoughts, values and ideals that the community and DEI share, and the spiritual backbone that keeps the entire structure rooted. In turn, the primacy of education in Dayalbagh's scheme is evinced by the fact that the foundation of DEI's precursor, the Radhasoami Educational Institute, was laid the day after Dayalbagh's own foundation on Basant Panchami in 1915. To understand the DEI education system, therefore, it is instructive to go back to the genesis of Dayalbagh and its philosophy, and back track the linkages that have evolved between the two over the last 150 years.

Spread across about 1500 acres of land on the banks of the river Yamuna, the Dayalbagh colony is self-sufficient in food grains, oilseeds, fodder and vegetables. A host of small-scale industries like textiles, soap and ayurvedic products provision basic needs and provide employment to youth. The cause of women empowerment is strongly supported through nano enterprises led and run by women (*Mahila* Units); these make and market a large number of items such as masalas, food items, clothes etc.

The ideal of *seva* or selfless service is one of Dayalbagh's pillars, a foundational teaching which is deeply embedded in its culture. Each day begins with *seva* in the form of agricultural field work early in the morning, where a variety of crops (paddy, peanuts, onions etc.) are planted, weeded (a variety of vegetables, pulses and dals), harvested (wheat, rice, dals etc), bundled and loaded into trucks. Men and women work alongside each other and this has been the practice ever since field work began here in 1943, at a time when women spent most of their lives in *purdah*. This ideal has been one of the community's biggest contributions to public life in general and to gender equality and, as we shall demonstrate, has had a profound impact on the development of education in DEI.

Dayalbagh philosophy stresses community living and earning of an honest wage so as to fulfill one's minimum needs. It also prescribes the practice of economy and frugality in one's life, and the importance of reaching out to the underprivileged and needy. The daily lifestyle of its residents is disciplined and reflects these ideals. Responsibilities like campus cleaning, security patrolling (*pehra*) etc. are shared by all the residents.

Inherent in its culture is the importance of inculcating high moral and spiritual values such as truthfulness, humility, duty, self-sacrifice and simple living. And while, of course, these values are not unique to Dayalbagh, their centrality in the educational scheme and in the development of individuals and the community certainly is.

Through such foundational teachings, Dayalbagh has been a noted pioneer of social reform. Beginning with its first school in 1917 that was set up as coeducational at a time when the idea of women's education was practically an oxymoron, DEI is today a coeducational institute where the number of female students outnumbers the male 70:30. Women empowerment, in fact, is one of the chief aims of DEI's entrepreneurial education.

Dayalbagh follows a "Sigma 6Q" approach and way of life. This model represents innovation in technology to nurture quality in the following areas in order to foster a sustainable way of life:

Use of renewable energy

Monitoring and control of quality of air and water for a healthy life

Quality and inclusive education

Quality healthcare accessible to all

Technological interventions growth in Agriculture and Dairy sectors

Inculcation of values and quality

Dayalbagh's self-sufficiency together with the fact that almost all the work done here is in the spirit of *seva* for which no remuneration is sought, minimizes costs making things affordable even for the poorest. Inflation is non-existent. The go-to mantra for its inhabitants is "Better Worldliness", a concept which eschews both crass materialism and extreme renunciation.

DEI Education policy of 1975

As mentioned earlier, right from the very beginning, education and Dayalbagh have been inextricably intertwined with each other and it would be hard to separate them. The Radhasoami Educational Institute began functioning in the form of a co-educational Middle School on January 1st 1917, and as Dayalbagh grew, so did the educational opportunities. Primary education, technical and vocational education, degree courses and women's education followed each other in quick succession. On May 16th 1981 the (by now renamed) Dayalbagh Educational Institute (DEI) was granted 'Deemed to be a University' status.

The vision document for DEI is its Education Policy of 1975 (appended to this Report). The Architect of the Policy, Revered Prof. Makund Behari Lal Sahab was Himself an outstanding academician, teacher and educationist, and an Alumnus of Lucknow University, who went on to obtain a D.Sc. degree in Zoology from the University of Edinburgh, returned to Lucknow University and eventually rose to become its Vice-Chancellor. So, from its inception, DEI imbibed the best practices of even international educational institutions, and this continues to be the practice even now. It should be noted that the DEI model was created and innovated so as to develop education at all levels in a scientific manner, rather than simply borrowing a "plug and play" model.

The Policy envisaged "radically breaking, on the one hand, the isolation of Humanities, Science, Technology, Engineering and Agriculture and on the other, the apathy and the traditional misconception of looking down upon the working with hands for attaining skills in craftsmanship and farming". The scheme was designed to make students "self reliant, confident and capable of self-employment in case higher academic courses are not pursued, and for giving the necessary slant to the existing educational pattern by a coordinated and logical sequence of training right from the primary to the University level".

The mission objective of DEI education is to evolve a complete person through physical, intellectual, emotional and ethical integration. This complete person will be imbued with moral and spiritual values (e.g. simple living, selfless service, dignity of labour), and possess social sensibilities (e.g. tolerance for diversity, understanding of rural life and social forces and needs). The Policy delineates how to go about achieving this through its Aims & Objectives, Educational and Organizational structures. The Policy is rooted in Indian culture, philosophy and spirituality.

One of the many unique facets of this Policy is its prescription of a number of compulsory Core Courses that are run across the Institute at all levels as part of the curriculum, and form a crucial component of its values-based education. They include comparative study of religion, agricultural operations, rural development, environmental studies, general knowledge and current affairs, and social service. It is evident that the very nature of these Core Courses exposes students to the problems of the lowest and poorest, forges connections with rural residents, and encourages community service, especially through agricultural activities such as sowing and harvesting of crops etc. They also instill in our students dignity of labour and respect for those who 'till, toil and soil' their hands, as prescribed in the Policy.

The Dayalbagh experience too, found its way into the Policy through the mapping of its best practices onto the DEI ecosystem. So the Dayalbagh experiment of daily agricultural field work is reflected in DEI's Core Course in agricultural operations. On-the-job training for youth, provided by Dayalbagh's small-scale industries, has been scaled up and formalized into DEI's semester-long Coop programme with industry. Dayalbagh's Mahila Units found correspondence in DEI's entrepreneurial model of women-led nano- and micro-enterprises. Engagement of youth in useful societal contribution was reflected in DEI's social service schemes. This was a risk-free mapping, since the prototypes had already been tested successfully in Dayalbagh over decades before being incorporated in DEI. The same holds true of a number of peer, community, national and global best practices that have found their way into DEI only after being thoroughly tested in the Dayalbagh community.

The Policy envisaged an integrated system, with primary, secondary and higher education forming a hierarchy under the umbrella of DEI. This hierarchy is necessary from the beginning itself because quality higher education cannot be provided until the middle level is good enough to enter higher education. Similarly, the primary level should also meet expectations. These interlinkages and dependencies allow the whole education system to be complete and integrated. Hierarchical structure allows flow to be maintained by creating a gradient, ensuring that we remain kinetic and in constant 'refresher' mode naturally.

Over the decades, the Education Policy has proved to be a versatile and flexible one, and has allowed us considerable freedom to innovate. These attributes have been mirrored in the development of education here. We have challenged ourselves consistently by raising the bar both in terms of our own goals and vision, and in the ensuing demands we make of our faculty and students. This is why we say that DEI has operated in constant 'refresher course' mode, keeping upto-date with technological trends and the demands of the times.

.DEI Education & Values

DEI is a completely secular and pluralistic institute. There is no promotion of any religion, and the institute prayer is non-denominational and invocatory. Beginning a century back, one of the aims of education here has been to impart quality education at low cost, and to produce students who are inspired to serve humanity through body, mind and ultimately, spirit. Physical development of the

body through sports and games, cognitive development of the mind through an inter-disciplinary academic programme, and a values-based, quality education that nurtures the spirit all add up to raise the level of consciousness of DEI's students creating a breed of superwomen and supermen.

Societal progress and not financial gain is the primary motivator in all that we undertake. Because the fees is extremely modest across all courses and disciplines, our education is accessible to all; even our engineering degree courses charge perhaps the lowest fee of all professional courses in India. The ideal of 'Fatherhood of God and Brotherhood of Man' is one of DEI's foundational teachings, and reflects how deeply we have internalized reaching out to those on the lowest rung of society's ladder.

We see education as having three levels:

The first level is the foundational level comprising primary, middle and high school. Here learning is through the well-known 3R's of reading, (w)riting and (a)rithmetic.

The second level is that of higher education and university education. A new set of 3R's that are characteristic of science (duly blended with integration provided by Systems approach) now come into play: **R**eductionism which represents the analytical power of science, **R**epeatability of experimentation which is the strength of science, and **R**efutation of hypothesis which is the means by which science has made its spectacular strides in the modern world.

The third level, the highest, comprises the education of spirituality, as mentioned earlier. Education in Dayalbagh started at this level with the enrolment of Satsangis in Radhasoami Satsang, and then moved to the foundational level with a bottom-up approach when the Middle School began functioning in 1917. At present, we have switched to the middle-out approach, where we link higher education with foundational education at the bottom, and with spiritual education at the top. By declaring ourselves an Institute of Excellence in Consciousness Studies, we have taken the lead in this last area. DEI's values-based approach is unique, and is operationalized through Core Courses, community service, agricultural activity, social service, rural development etc. Unlike other Institutes, these are not merely outreach activities that are peripheral to the mainstream. Instead, at DEI, they *are* mainstream, deeply woven into our education, as much a part of the academic programme as any traditional subject. The Core Courses are leveraged by us to make societal contributions, concern for the underprivileged being front and centre. They are the routes through which we build up our networks and communities. One example is the free Medical and Assistance Camp that DEI hosts on alternate Sundays for the benefit of the residents of nearby villages. In addition to doctors who volunteer their expert medical services here, DEI students hold in adult literacy campaigns and a 'hole-in-the-wall' experiment that exposes village children to computers. Villagers participate in spiritual readings and teachings from Holy Books which helps to raise their levels of consciousness. An agricultural assistance team advises villagers on crop-related issues. A whole community has been built up around the Medical Camp to everyone's advantage.

An Entrepreneurial University& the DEI Model of Entrepreneurship

Given the propensity for disengaged youth to get lost in habits that benefit neither themselves or nor the country, and in the light of DEI's avowed aim of serving society especially the underprivileged, the question arose as to how these aims may best be achieved. We view the integration of skill development, education and student entrepreneurship as one of the most potent enabling mechanisms and our conviction has led us to declare ourselves an "Institute of Excellence in Entrepreneurial Education". Our "Skilling to Entrepreneurship" approach is self-sustaining and ensures that no one is denied an opportunity for personal growth and development, benefitting society at large. The entrepreneurship model that has emerged allows students to self-support their education, making them job creators rather than job seekers. And, as we shall show, this model provides a platform to introduce concepts of frugal innovation and consciousness By 'student entrepreneurship' we mean that we encourage and provide a platform for our students to develop and market a variety of products and services while at DEI. Our skill-based and vocational programmes are designed to support this, providing training and hands-on entrepreneurship experience through "For students, by students" initiatives. One such initiative is the DEI 'Quantum' Jugaad Shop, which itself is run by students. A variety of products such as kurtas, salwars, shirts, cushion covers, clay pottery etc., made by students of different Faculties and programmes are sold here. Another "For students, by students" initiative is the wildly popular flavoured milk and milk products (that range from *shrikhand* to dark chocolate) made by students of the B.Voc. (Dairy) programme, also sold in the DEI 'Quantum' Jugaad Shop. The milk is sourced from Dayalbagh's own Dairy at minimal cost. It is skimmed and homogenized, making it low-fat and low-sugar. This reduces costs while adding to health benefits. Another such initiative is the canteen that is run by the ** students. Their freshly made snacks are eagerly awaited during the recess and they always return empty handed! In keeping with DEI's policy, the key feature across all of these products is the low pricing that ensures that each and every student on the campus is able to afford it.

An entrepreneurial approach has several benefits: it provides invaluable experience to students in developing and manufacturing these products, giving them a head start in setting up their own micro- and nano- enterprises once they leave DEI. Judicious selection of options can facilitate the development of products that provide relief to those in need. It helps in job creation, it allows independence and it dovetails with our Institute's aim of service to humankind. The model followed at DEI can be scaled up easily to become self-sustaining.

As with so much else at DEI, the Entrepreneurship Model that we advocate is unique for a number of reasons. While other entrepreneurs seek funding from venture capitalists, the DEI model advocates a frugal, *jugaad* approach to problem solving, and tries to do more with less. We encourage, nay, we have perfected the techniques of *jugaad* and frugal innovation; here it is worth pointing out that the concept of *jugaad* does not imply sub-optimal but rather, the creation of a product that is flexible in

its usage, and has been economically innovated using locally available materials, manpower and resources. Because of this, such products are affordable and well-received in the market; their popularity ensures that no separate marketing or advertising budget is required. One of the most promising frugal products developed at DEI is a 3D printer, developed through *******student projects executed during the academic semester (this being another route we follow to take our students from skilling to entrepreneurship). Not only was this printer developed in-house using *jugaad* innovation, the higher versions of it were made using components printed by the lower versions!

While we want our students to think big and generate wealth, DEI's Entrepreneurship Model also encourages them to learn from the example of DEI itself to take a community-based view. We attach great importance to using entrepreneurship to bring about "better worldliness", a moderate approach that channels profits towards philanthropy, builds communities and avoids extremes. In this way an entrepreneur can bring about an entire community's progress.

The model of philanthropy that large business groups such as the Tatas, Birlas, Jindals etc.practice is different from ours. While they mostly outsource work to NGOs, we go out into the field and do it ourselves. From ideation to business plan to implementation and execution, our student community owns each and every step. Nothing is outsourced so we are able to control costs and incur minimal expenditure. This not only makes our goods cheaper than those of others, but because we do things ourselves, we accept risk, we learn continuously, innovate frugally to keep costs down and are able to troubleshoot and course correct instantaneously.

The DEI brand of entrepreneurship showcasing both student and community involvement in is best illustrated through the ATMA (Apparel and Toy Manufacturing Association) project undertaken in the Rajaborari estate, a collection of *adivasi* villages deep in Harda district's tribal belt in Madhya Pradesh. Here, *adivasi* women are taught the basics of cutting, sewing and stuffed toy making by mentors and students from DEI. All raw materials and equipment such as scissors, sewing machines etc. are provided by us. The finished products-salwar-kurtas, shirts, stuffed toys etc.-are sold in DEI's 'Quantum' Jugaad Shop. The women are paid for their work, and are free to use the sewing machines to earn extra money on the side. The raw material (fabric, buttons etc.) is sourced by the Dayalbagh community at very reasonable prices. The project is run by students of the B.Voc. (Apparel Manufacturing) programme. So, even as they train the village women, they themselves learn and practice the DEI brand of entrepreneurship. And since the aim is to empower the *adivasi* women by training them and allowing them to earn a dignified living, there is no profit angle and the entire exercise involves minimal cost.

The benefits of the DEI Model of Entrepreneurship are many and obvious. In the case discussed above, there is involvement of the community through procurement of the raw material at low cost. Students are exposed to the realities of life in remote village communities, and develop empathy and an appreciation of their problems. This inspires in them a desire to help and serve those on the lowest rung of society's ladder which, in turn, motivates them towards entrepreneurship. They learn the value of risk-taking. They have the satisfaction of knowing that they are making a substantial societal contribution by working towards a greater cause, and that their efforts benefit the *adivasis*. In turn, the *adivasis* gain because they get trained and educated, can earn a dignified wage and graduate to setting up their own little businesses. A 'jugaad' approach to innovation teaches our students to develop products that are nature-friendly and affordable by all, and reinforces the importance of reaching out to the last, least and lowest. By working selflessly to help the villagers our students imbibe good values and ethics, altering their mindsets and destinies along with the destinies of others.

An Institute of Excellence in Consciousness Studies

The DEI Model of Entrepreneurship is not limited to the period of the students' stay in this Institute. The ideals and values behind it, together with the values-based education they receive here, become part of who they are, and are carried within them when they leave our gates. The frugal, 'jugaad' approach to entrepreneurship becomes a frugal approach to life in general, minimizing one's own needs, and promoting sustainability by reducing one's footprint on the planet. Selfless service, exposure to those worse off than themselves and empathy with their problems translate into a desire to help others, moderation in habits, rejection of crass materialism and the blind pursuit of wealth. As key players for a cause greater than themselves, our students become aware that they hold the power to change society, to make a difference. These factors enhance their higher order thinking skills and contribute to raising their levels of consciousness. This brings us to the second of DEI's avowed aims: to become an Institute of Excellence in Consciousness Studies.

For our students to realize their fullest potential and live a life of ultimate benefits and qualities, they should be awake to some of the fundamental questions pertaining to our existence. What is the purpose of creation, of life? Where do we fit in, what is the nature of death? Maths, quantum mechanics, neuroscience, philosophy, theology are just a few of the subjects that shed light on the many aspects of physical creation, and whose tools are brought to bear on some of these questions. We want to make a significant contribution to research in these areas. Consciousness is the reservoir from which such questions arise, and India has been both, the fountainhead and practitioner of the philosophy of higher orders of consciousness since Vedic times, but the nature of consciousness is itself poorly understood. We want to work toward proposing a new science of consciousness, and have already made significant progress in scientifically and experimentally substantiating the existence of these higher orders of consciousness through the SQUID facility in the Centre for Consciousness Studies.

The growing use of Artificial Intelligence has left leading Western thinkers and scientists struggling to find solutions to ensure that intelligent machines do not get out of human control. We feel that the answer to this is to transform humans themselves into "super intelligent and super conscious" humans, who possess high values, ethics and qualities. These "super intelligent and super conscious" beings would have no problem in controlling intelligent machines, and we feel that our education system has worked towards this end since its inception through its unique, values-based approach. It is only fitting that DEI, which is an educational institute that is housed in an ashram, makes a natural progression to scientific research about the nature of ultimate reality. The aim of science is to unveil the deepest and profoundest truths of nature. This is also the aim of religion, so it is strange that each has been considered the antithesis of the other. Our approach, as an Institute of Excellence in Consciousness Studies, is to try to integrate the two by applying the principles and rigor of science and scientific method to religion. Ideally, we would like our students to contribute to one or both of these areas, since a better understanding of either implies a better ability to contribute to the development of society. In turn, contributing to society will enhance their thought processes making their lives more meaningful.

We make a start through our emphasis on values on the one hand, and an academic curriculum that favours inter-, trans- and multi-disciplinarity on the other. Current ideas in string theory, quantum field theory, black holes and quantum biology blur the boundaries between science and religion, and this is where our inter-disciplinary approach (a systems approach) works well. Through study of science, mathematics, engineering etc., our students gain a deep understanding of nature. Core Courses such as Comparative Study of Religion explain the teachings and ideas of different religions, so that students can themselves see how religion provides deeper meaning to life.

The pillars of entrepreneurship and consciousness studies stand apart from each other and, on the face of it, the two would appear to share little. But, as we have described above, the systems approach that is followed at DEI ensures that they actually feed off each other. Also, since the two encompass divergent subjects, we ourselves are constantly challenged to maintain our standards in all of them. Thus, excellence in Entrepreneurial Education and Consciousness Studies implies excellence across a number of subjects.

Conclusion

We are realistic enough to know that not all our students will turn entrepreneurs or do research in consciousness. But we do hope that the unique direction of DEI education will inspire some of them to turn in these directions. At DEI, students are shown the way in which individual actions can benefit communities. Through social service, agricultural operations, entrepreneurial activities etc. they are given the opportunity to actually be part of this transformation. We feel that there is really no other institute which is even *thinking* in these directions, much less doing anything. This view was echoed by Prof. Dan Mote, President of the University of Maryland, College Park, one of our long-standing partners. (Quote to be inserted).

Refresher and Orientation courses serve a limited purpose if they function only at specific times and for specific durations. This is something that should be happening every moment and that is why we need to work all shifts, 24 hours and throughout the seasons.

We have moved from potential values and quality to kinetic system of values and quality

Final Education Model based on DEI education Policy

DEI aims to mould its students into a 'Complete Person', inculcating in them (i) a value system academic values, moral and spiritual values and social sensibilities, (ii) entrepreneurial skills for selfsupport and awakening (iii) a higher order thought process that would enable a search for the Ultimate Reality. In an Alumni survey carried out in 2006 the Alumni of DEI rated the values they had acquired while studying here as being the most important benefit.