75

Azadi Ka
Amrit Mahotsav

Special Issue

celebrating

75 Years of India's Independence

and

150th Birth Anniversary of Sri Aurobindo

#Let'sBeatCoronaTogether

AIU Invites Proposals for Organizing
Roundtables of Newly Appointed Vice Chancellors
in the Session 2022-23

Association of Indian Universities invites proposals for collaboration from member universities/institutions to organize Two **Two-day Roundtables of Newly Appointed Vice Chancellors** in the current financial year ending on March 31, 2023.

The Roundtables are to be scheduled between **October 2022 to March 2023** during mutually convenient dates for the collaborating University and AIU.

Member Universities/Institutions of AIU are invited to send their proposal with an Expression of Interest (EoI) from the Vice Chancellor to collaborate with AIU in organizing the Roundtables. The institutions are required to send the Proposal containing (i) an Expression of Interest through a letter from the Vice Chancellor, (ii) Financial Estimates, (iii) Two Sets of Dates for convening the Events.

The proposal duly Approved /Endorsed by the Vice Chancellor/ Head of the Institution **along with two sets of dates** for convening the Roundtables must be sent latest by **September 01, 2022,** via Email: researchaiu@gmail.com **to:**

Dr Amarendra Pani
Joint Director & Head (Res)
Association of Indian Universities
AIU House, 16 Comd. Indrajit Gupta Marg
New Delhi – 110 002
E-mail: researchaiu@gmail.com

The allocation of the event to the University will be done after the selection process, and on terms and conditions as laid down by AIU. The details of terms and conditions will be communicated to the University after the selection process by the AIU.

N.B.: The Roundtables will be conducted under the banner of AIU. AIU is not a Funding Organisation. However, a token amount will be contributed by AIU for organizing the Roundtables. The two Roundtables will **Not** be allocated to the same University.

For any further queries please contact the coordinators on 011-23230059, Extn-202/241, Fax No: 011-23239325, E-mail:researchaiu@gmail.com

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Opinions expressed in the articles are those of the contributors and do not necessarily reflect the views and policies of the Association

EDITORIAL

Let Our *Tiranga* Fly High Ever

Yes! Our Country, Our India, Our Bharat is celebrating 75th Anniversary of Independence on the 15th of August 2022. In the joy of completing 75 years of independence and to awaken the feeling of attachment towards the country, Hon'ble Prime Minister has announced the celebrations of *Azadi ka Amrit Mahotsav* 75 weeks ahead. Many events were organized in the last 75 weeks to commemorate the occasion. It is indeed a matter of celebration not only because our Country got independent from the clutches of colonial rule and attained sovereignty, but also because it has carved a niche for itself among countries across the world. Starting from almost scratches at the time of Independence, India has made significant strides in terms of social and economic development; agricultural, industrial, and technological development; infrastructure; income levels and standards of living of its citizens. India has also come a long way in terms of improving its human development indicators *viz* poverty, literacy rates, and Gross Enrolment Ratio at primary, secondary, and higher education levels. Thus, its development journey over the last 75 years is marked by significant milestones and reforms that enabled it to achieve substantial progress in many areas including rise in income levels, growth, life expectancy and a wide variety of other economic indicators.

India is linguistically and culturally rich country. It is endowed with tremendous natural resources, natural beauty and a strategic geographic position. If the immense potential of these resources is utilized efficiently, an exponential inclusive and sustainable economic growth can be triggered through business, tourism, industry, Information and Communication Technology, etc.

At the same time, there are some development challenges still facing the country including poverty, high prevalence of gender-based violence, vulnerability to natural disasters, low intensity conflicts, fragmentations, etc. These challenges may seem intractable. However, determined leadership, credible and trusted institutions and strong accountability at all levels will help us combat these challenges. Moreover, it becomes responsibility of every citizen to serve the nation and make every possible effort to make our county better. The youth of our country have the power to change the nation and lest, we make best use of the demographic dividend.

This year 15th of August is significant for the country for one more reason. On this day, the country is celebrating sesquicentennial birth anniversary of Sri Aurobindo Ghose who is described as a *rishi*, a poet, a scholar, a literary critic, a philosopher, a *yogi* and most reverently as the Prophet of Indian Nationalism. On 15 August 1947, the day India obtained her independence, it was 75th birthday of Sri Aurobindo. It was a reward for someone who had tirelessly worked for this momentous event. On 14th August, 1947, Sri Aurobindo gave a message to the Nation which was broadcast on All India Radio, Tiruchirappalli. In his message, he spoke about his Five Dreams. We need to work towards fulfilling this dream to realise the meaning of independence.

He commenced his message by saying, "I take this coincidence, not as a fortuitous accident, but as the sanction and seal of the Divine Force that guides my steps on the work with which I began life, the beginning of its full fruition. Indeed, on this day I can watch almost all the world-movements which I hoped to see fulfilled in my lifetime, though then they looked like impracticable dreams, arriving at fruition or on their way to achievement. In all these movements free India may well play a large part and take a leading position."

His first dream was, *"India be united again".*

The second dream was to see the *"resurgence and liberation of the peoples of Asia".*

The third dream was of *'world-union forming the outer basis of a fairer, brighter and nobler life for all mankind'.*

The fourth dream was a *'spiritual gift of India to the world'.*

The fifth dream*,* perhaps the most important, was a new *"step in evolution which would raise man to a higher and larger consciousness and begin the solution of the problems which have perplexed and vexed him since he first began to think and to dream of individual perfection and a perfect society".*

It is a matter of great concern that even after 75 years of Independence, his first dream, of *United India* is not fulfilled yet in full sense of term. The country is fragmented in many narrow ways still. To make our country lead the world, it is our responsibility to work towards fulfilling the dreams of Sri Aurobindo.

We very well understand that attaining independence was not an easy feat. It involved the sacrifices of millions of brave and committed visionaries of the country. Some are popular and some unsung s/heroes. This is the day to remember their sacrifices and penance sincerely and wholeheartedly.

As India commemorates 75 glorious years as an independent nation, it is indeed a matter of pride to celebrate this momentous occasion by recounting the story of its glorious journey and paying tribute to all those who have connected us to this string of history making. Obviously, our history is a vital part of who we are!

As we are celebrating the *Amrit Mahotsav,* to awaken patriotism among the citizens of our country and to make it more commemorative Hon'ble Prime Minister Shri Narendra Modi phonated the slogan '*Har Ghar Tiranga'* and motivated all the citizens of India to hoist the flag of our country in their homes from August 13 to August 15. Let us take this opportunity to make our Tiranga fly high ever on the sky to tell the world that we are the greatest Nation on this earth.

On this occasion, let us take a pledge that we all will work hard towards the progress of our country to keep up its name and fame ever high in the world.

Sistla Rama Devi Pani

75 And Counting: Where are We as a Nation?

M S Kurhade*

"Gandhi is the father of India's defiance and its symbol. Gandhi walks to the sea to make salt in defiance of the British. It becomes a popular pilgrimage. The idealism of the youth spills into it. So does the leaderless nation's yearning for a leader. Gandhi has given his followers the elation of standing up to a foreigner who is the master in their house."

-Louis Fischer.

Mr. Clement Attlee, the British Prime Minister, announced on (Sept. 1945), "The King's speech at the opening of the new Parliament contained this passage: By the promises already made to my Indian People, my Government will do their utmost to promote in conjunction with leaders of Indian opinion early realization of full self-government in India".

On 19th September 1945, Lord Wavell, Governor-General and Viceroy of India said, "That is the end of the announcement which His Majesty's Government have authorized me to make. It means a great deal. It means that His Majesty's Government is determined to go ahead with bringing India to self-government at the earliest possible date. They have, as you can well imagine, a great number of most important and urgent problems on their hands: but despite all their pre-occupation, they have taken time, almost in their first days of office, to give attention to the Indian problem, as one of the first and most important. That fact is a measure of His Majesty's Government's earnest resolve to help India achieve early self-government".

The object of the Indian Independence Act, 1947, was to give effect to the June 3, 1947 Plan of Lord Mountbatten, Governor-General and Viceroy of India, "The title of "Emperor of India" was to be dropped from the royal style and titles of the King of England". And entire Delhi kept awake to witness the historic event of ushering in the freedom of India at midnight on 15th August 1947. Unprecedented scenes of enthusiasm were witnessed both inside the Constituent Assembly Chamber, where seething, swaying humanity wildly cheered the momentous event, heralded with the blowing of conches.

* *Principal, D.T.S.S. College of Law, Malad (E), Mumbai-400097, Director, Sanskar Sarjan Education Society, Malad (E), Mumbai-400097 and President, Association of Non-Government Colleges, Mumbai. E-mail: principal@sanskarsarjan.org.*

Raising to the height of the occasion, Pandit Jawaharlal Nehru made a speech in the Assembly that was at once notable and a masterpiece of literature. "Years ago we made a tryst with "destiny", he said, "and now the time comes when we shall redeem our pledge not wholly or in full measure, but very substantially". At the stroke of the midnight hour, when the world sleeps, India will awake to life and freedom". With becoming humility, Pandit Jawaharlal Nehru reminded the House that freedom and power bring responsibility and "that the future is not one of ease or resting but of incessant striving, so that we may fulfill the pledges we have so often taken and the one we shall take today."

It's that time of the year when Indians look forward to celebrating India's glorious past and its journey to freedom. However, Independence Day this August 15 will have a special ring to it. It's the 75th year of the historic moment when India became an independent nation, breaking free from its colonial past. Naturally, Indians all over the world are excited about the milestone year and are going all out to express their patriotism in different ways.

It's an occasion to celebrate but is also one to pause and reflect on. It's what we do at milestones. And India has arrived at a momentous one. At 75, we are a riveting story of achievement and opportunity- a successful democracy, an economic superpower in the making, a responsible nuclear nation, and a beacon of political stability. Spirituality to startups, we inspire and excite the world. Our diversity doesn't impede us, it enriches us. Our billion-plus voices don't make a cacophonous mess, they harmonize the idea of India. Yet, there are challenges and many unfinished tasks. As a country, we draw our character from the journey to 75, a road that has not only tested our resolve but also strengthened it. Over the next year, we will recall and reconstruct the milestones of that journey. Let's savour this ride together.

Writing on the 50 years of free India (1947-1997), George Mathew of the Institute of Social Science, wrote "On August 15, 1947, some 147 million Indians set out on a voyage of self-discovery and renewal. It was a movement of a people yearning for a freer and better life. Where have they and their children arrived

half a century later? When extrapolated further, 75 years later?"

India's greatest resource is its people. Through innovation, economies of scale, and network effects, they can deliver miracles if they are given the tools. But if the overall pie doesn't grow, the danger is that social conflicts to divvy it up will grow instead. Political leaders should stop walking us down this dangerous road. As much as India's power as a nation-state is a work in progress, so is its quest for domestic harmony and prosperity. So, M. Visveswaraya (1920) said, "The Indian People have to choose whether they will be educated or remain ignorant, whether they will come into closer contact with the outer world and become responsive to its influences, or remain secluded and indifferent: whether they will be organized or disunited, bold or timid, enterprising or passive; rich or poor; strong and respected or weak and dominated by forwarding nations. Action, not sentiment, will be the determining factor."

Large-scale loss of livelihood options is still simmering with discontent. Measures so far taken have not brought visible improvements. Here too meeting of heads is needed. Of course, all said and done, still a lot needs to be done. Therefore, we should spend more time reviewing what's already been done and see that there is progress and that these initiatives are benefitting all those intended target groups, including the last man out there.

As we celebrate 75 years of Independence, perhaps, we should find a way to locate this strand of pride that brought us together. There is a simplicity, purity, and effortlessness about it that can act as a salve in these divided times. Our main goal in celebrating Independence Day is to educate our young generation about the pride and courage of our great freedom fighters, as well as a colonial rule. It's the day when we put aside our cultural differences and come together as true Indians.

Independence Day is marked by a strong sense of patriotism and nationalism across the country. The day also reflects our pride and solidarity in the country's diversity. The women and men who won our country its independence were driven by a dream. India still needs to dream. The country's 75th Independence Day will necessarily be a sober anniversary – it is the second I-Day that will be marked amidst the Covid pandemic. But it should also be an occasion to honestly take stock of difficult, unfinished tasks

and an occasion to hope we will find new resolve to undertake those tasks.

In these 75 years, India's growth story has been impressive, from agricultural production to nuclear and space technology, from affordable health care to world-class super specialty hospitals, and world-class educational institutions, from Ayurveda to biotechnology, from giant steel plants to becoming an IT power and having the third-largest start-up eco-system in the world.

Given India's great diversity, in terms of geography, language, religion, culture, and ethnicity, the country's journey towards development, prosperity, and stability is a story of inspiration. Strong democratic institutions, a widely respected electoral body, the rule of law, vigorous media, and a vibrant civil society have contributed to what India is today. Therefore, Robert Blackwill (2003) aptly said, "India is a pluralist society that creates magic, with democracy, rule of law and individual freedom, community relations and (cultural) diversity. What a place to be an intellectual!. I wouldn't mind being born ten times to rediscover India."

It was under the leadership of great souls like Raja Ram Mohan Roy, Swami Dayanand Saraswati, Dadabhai Naoroji, Sir Pherozeshah Mehta, Mahadev Govind Ranade, Gopal Krishna Gokhale, Lokamanya Bal Gangadhar Tilak, Bipin Chandra Pal, Lala Lajpat Rai, Chitranjan Das, Motilal Nehru, Pandit Madan Mohan Malaviya, Mahatma Gandhi, Sardar Vallabhbhai Patel, Netaji Subhash Chandra Bose, Veer Savarkar that our freedom struggle was fought. As we seek to transform India into a developed and prosperous nation, their lives and thoughts continue to inspire us.

A true leader has the confidence to stand alone, the courage to make tough decisions, and the compassion to listen to the needs of others. He does not set out to be a leader but becomes one by the equality of his actions and the integrity of his intent. A good leader should just do this and follow out-of-the-box thinking to ensure that transparency and efficiency factors dominate at all levels in the administration to bring a total transformation in the state administration. This will ultimately propel the benefits to reach across every section of society. From constituting an economic advisory council to advising on the innovative ways of overhauling the state's economy to intensifying efforts to curtail the spread

of the pandemic to easing norms for business a leader should work tirelessly with single-minded devotion to accomplish multiple tasks at breakneck speed.

There is a reason why the Independence Day speech is made from the ramparts of the Red Fort. Subhash Chandra Bose and Pandit Jawaharlal Nehru knew instinctively that this icon of imperial power could be transmuted into a unifying nationalist symbol. Anti-colonial patriots turned the omphalos of the Mughal empire into the navel of the nation-state. The Red Fort became our umbilical connection with a pre-colonial yet pan-Indian past.

The year 2022 is a special one as we will celebrate the 75th Anniversary of our Independence. This is a significant milestone in the journey of our republic and is an opportunity for reflection and introspection on our past achievements and future challenges. After years of subjugation and struggle when India attained independence on August 15, 1947, it was new dawn filled with hope and the promise of a better future. But challenges were enormous-poverty, illiteracy, malnutrition, and lack of any worthwhile industrial and scientific base, to name a few India is recognized as an emerging world power.

India is a vibrant Parliamentary Democracy that is emerging as an important player on the world stage and continues on its developmental journey with greater confidence, competence, and commitment. Everyone should strive for it Prime Minister says in their Independence Day speech. In his eighth consecutive address to the nation from the ramparts of the Red Fort, Hon'ble Prime Minister Shri Narendra Modi called for making the next 25 years (when India will hit a century of Independence) a glorious one with new thresholds, aspirations, and dreams, coining the phrase "*Sabka Saath, Sabka Vikas, Sabka Viswas, Sabka Prayaas*" (with all, development for all, the trust of all, the striving of all). "There comes a time in every nation's life where it defines anew what development means for it, and resolves a new on how to reach its goals, that moment for our country is now", he said. He termed the next 25 years as *"Amrit Kaal"* for achieving these goals.

His speech, nearly 90 minutes in all, went over the efforts of his government to simplify laws, make government less intrusive, heavy investments in infrastructure including the 100 lakh crore *"Yatishakti initiative"*. The master plan for which would be unveiled soon. He pointed out India's commitment to the environment and its climate change goals by stating that the country was committed to a "circular economy", and the new vehicle scrappage policy was part of that as well as the setting up of the National Hydrogen Mission for the encouragement of green fuels.

India is on the cusp of a major transformation. We aim to build an ecosystem where everyone can reach his or her full potential and lead a fulfilling and meaningful life. The ongoing COVID-19 pandemic has disrupted the normal course of life and has put tremendous stress on our lives. But the good news is how we have carefully calibrated our collective response to the pandemic. Our resolve and resilience have made us endure the negative impact and prompted us to tap into our innate strengths to meet the challenge. We are also turning this threat into an opportunity by moving towards *atmanirbharta* or self-reliance.

The achievements of independent India are plenty, including the Green Revolution ensuring food security for the more than 1.35 billion population, the Right to Information bestowed upon them, the minimum national rural employment guarantee scheme, and, more recently, the JAM trinity (the linking of Aadhar, or the unique Identification Number issued to all residents, with Jan Dhan or people's bank accounts and mobile numbers) and Ayushman Bharat, the national health insurance program. Above all, we have a remarkable constitution that has stood the test of time since it was adopted in 1950.

On 29th August 1947, a Drafting Committee of seven members was set up with Dr. Babasaheb Ambedkar as Chairman. The other important members of the Committee were K.M. Munshi, T.T. Krishnamachari, Gopalaswami Ayyangar, and Alladi Krishnaswami Iyer, Sir B.N. Rao, and S.N. Mukherji. Eight months were given to the people to discuss the Draft Constitution and make their suggestions. From 4th November 1948 to 9th November 1948, the general discussion, and between 15th November 1948 and 17th October 1949 the draft was thoroughly discussed. About 7635 amendments were proposed and 2473 amendments were discussed by the Constituent Assembly. The third reading of the draft was given from 14th November to 26th November 1948. The New Constitution of India was adopted on 26th November 1949, and the same was signed by Dr. Rajendra Prasad as the President of the Constituent Assembly which came into force on 26th January 1950.

Dr. Babasaheb Ambedkar said "Constitutional morality is not a natural sentiment. It has to be cultivated. We must realize that our people have yet to learn it. Democracy in India is only a top-dressing on Indian soil, which is essentially undemocratic."

The India of 2022 is a confident nation with a modern outlook and a firm belief in *Vasudhaiva Kutambakam* or "The world is one Family". India of 2022 is a country with the third largest economy in PPP terms. It has a global outlook and global aspirations. It is a resurgent India. The India of 2021 is an *Atma Nirbhar Bharat* or Self-Reliant India.

India was an early mover in Information Technology, and since the 1990s has become a major exporter of IT services. Further, the Digital India program launched in 2015 to transform India into a digitally empowered society and a knowledge economy added momentum to this sector. As regards space technology, besides its Moon and Mars missions, India is preparing for a human space flight mission. Its space program is one of the most advanced and cost-effective in the world. India has launched hundreds of communications and remote sensing satellites, contributing to tele-education, weather forecasting, and remote resource mapping. India has the third largest startup ecosystem in the world with nearly 50 'unicorn' organizations as of now.

Affirmative action has enabled all sections of society to have access to higher education, and government jobs and to rise to occupy leadership positions in both public and private sectors. We are proud of our contemporary achievements in the area of science and technology. Indeed, India has a longstanding nuclear power programme, which has an impressive record in both safety and non-proliferation. In space technology, India has successfully launched Chandrayaan (Moon Explorating Mission) and Mangalyaan (Mars Orbiter Mission).

Our developmental model should also be balanced. We should strive to bridge the disparities that still exist among people, communities, or regions. We should endeavour to bridge the rural-urban divide and the emerging digital divide. Public-Private Partnership is the way forward for India's development. Equally important is people's participation in developmental programs. The success of the *Swachh Bharat Mission* has amply demonstrated that government programs should become mass movements, owned and led by the people.

With a median age of fewer than 30 years, India is a young nation in an ageing world. This youthful energy needs to be channelized constructively for nation-building. If our youth are sufficiently motivated and equipped with the necessary skills, they can become change-makers in society.

India needs to grow at a rapid pace to raise the standard of living of the people. But this growth has to be environment-friendly and sustainable. We are duty-bound to leave a livable planet for our future generations. Our ancient culture teaches us to live in harmony with nature and all other beings. We must preserve our culture and protect nature in order to have a bright future.

As great an achievement has been the deepening of Indian democracy, including among communities oppressed for centuries. With education and urbanization, a harshly hierarchical and ghettoized society has become less so. But we cannot take for granted today's liberties that allow us to freely choose who we marry and what we eat or wear or watch on our screens. The regressive pushback is strong. The governing infrastructure of India, from its Executive to its Parliament and political parties, and most crucially, its courts, has to stand up for individual freedoms even more strongly. Friedrich Schiller rightly said, "The first law of decency is to preserve the liberty of others."

It is true that there has been progress on all fronts, but if the absolute number of those at the end of the development ladder has remained high, there must be some profound reasons, while it is a clear indication of our failure in redistributive justice. This call needs a relook.

India at 75 looks great with the talent and the youth it hosts in both, rural and urban India. If the youth is given further support and a platform to grow, India may become one of the world's most powerful nations. India is recognized as an emerging world power. We are the third largest economy in terms of Purchasing Power Parity. The necessity for youth awareness arises from the fact that the nation's future rests on the youngsters and their power to influence the country.

India has grown across multiple sectors in the past 75 years leading to tremendous economic growth in India. We have witnessed women entrepreneurs contributing to the economy at large. We have almost 62 percent of the population in the working-age, of

which 54 percent are below the age of 25. Thanks to this we have a skilled workforce across various industries. In the coming years, I hope India grows manifold economically and across industries so that she emerges as a superpower in the world. Well, hope springs eternal. India in spite of our political masters, has the potential to be a world economic power before long. But one thing is certain. India will not be able to develop sustainably unless it reduces gender and income inequality.

Even in the global arena, India is a land that is loved and recognized for its cultural opulence, a country that has always taken pride in its heritage, arts, crafts, and culture. At 75, we are seeing India and its people embracing their roots and traditions and whole-heartedly opting for 'India-made' (Swadeshi) products and fashion. Handmade and handloom have found their way back into the spotlight. As the years have gone by, brands and consumers have become increasingly conscious of the choices they make and their impact on the planet. Today the textile industry is one of the major contributors to the economy. As we celebrate our country's 75th Independence Day, we must acknowledge the great strides it has made in the direction of being more sustainable. India at 100 will be more of a self-sustained country that will use and promote sustainable products with a reduced carbon footprint. Looking beyond the retail landscape, our focus on technology and medical research has been high over the last few years and if we continue to do this, we will also emerge as one of the leaders in this space.

On 15th August 1947 at the stroke of the midnight hour, India awakened to freedom. Inspiring each one to contribute to the country's growth. It was the rise of a new India where growth and social inclusion were a part of its credo.

On 75, Independence Day, India has made significant strides in the global and national arena as it aims for the USD 5 trillion mark. Thanks to the efforts of entrepreneurs and industry leaders coupled with initiatives implemented by successive governments. For the first time in the history of the modern world, a country is undergoing economic modernization under the auspices of mass democracy. A subcontinent ravaged by colonialism and the communal slaughter left behind as a parting gift was going to build a self-consciously non-denominational nation-state. The idea of India will endure not because it was proposed by great men; it will endure because it was an idea designed to address the unprecedented challenges faced by a sub-continental nation-state.

Most people equate independence with freedom. Freedom, unlike independence, cannot be turned into a ceremony or an event. It cannot be put down to a date. It is either an ongoing condition of life, or it is nothing. The dawn of independence is an event and an outbreak of aspirations. Outbreaks have their dates. To have a date is to be fixed like a monument. It is there, solemnly marginalized from the general run of life. Have we lost our sense of patriotism? There was a surge of patriotism and we could feel it all around us. Today, we are all divided into a unified country. Everyone has their own goal and their own interpretation of patriotism. There is nothing cohesive about it. Does patriotism belong to an era gone by? Will we ever regain that sense of pride and revel in working for the good of the nation again? I wonder.

The attainment of Independence is an event that belongs to the past. Its scope-no-doubt glorious-is realized and closed. Nothing further can be added to it. It can only be repeatedly commemorated. The colonies left on 15th August 1947. A long night ended that day. Did it mean the beginning of a new dawn as well? Well, that question has to be answered with reference not to independence but to freedom. Freedom is the womb of the new and the emerging. It pertains to the capacity for innovation and enterprise. Freedom is futuristic. It is akin to creativity and is somewhat ornamental perfection. To attain freedom as Pandit Jawaharlal Nehru said, for the long-suppressed soul to find a new utterance. It implies a change in thinking and relating. Above all, freedom involves evolving through higher stages towards perfection. To be free is to go beyond the given, the prevailing, the status quo.

Ceremonial independence may inaugurate the prospect of freedom, but cannot guarantee its fruits to all citizens. Freedom is a positive state in which individuals can develop their potential optimally. Freedom also means a commitment to a shared sense of purpose by which the fruits of personal development enrich society as well. Celebrating freedom in this sense cannot be a periodic official ceremony. Arguably, proactive freedom adds substance and gravity to the celebration of independence. But, without a commitment to make freedom real and meaningful to all citizens, celebrations of independence merely showcase the mystique of the state, not the mettle of a people.

At ceremonial commemorations of independence, the leaders are heard. In freedom, citizens express themselves through the quality of their life. The hallmark of a healthy society, wrote Bertrand Russell in Political Ideas, is that its members are free to express themselves through the work they do. Alienation, Karl Marx argued prior to Russell, denotes the contrary state: one in which individuals act as per an alien will. People, in this state, exercise little control over their predicament. They are acted upon, rather than acting. Such a situation leads itself to hero-worship, not development or people's empowerment.

Aristotle and Plato defended slavery. They did so, ironically, for the sake of freedom. In ancient Athens, only those who were 'free' from their domestic responsibilities could be, as citizens, eligible to participate in the affairs of the city-state. For them to be free, there had to be slaves to mind their affairs. The freedom of a few was erected on the slavery of many. In rationalizing this, Greek thinkers were pragmatic. That pragmatism runs like a thread through the tapestry of organized life to this day. Freedom remains beleaguered in every society. Freedom is an ideal, not a realized state. The genius of a nation must be tested, therefore not by the grandeur of its celebrations, but by the extent to which it makes freedom meaningful to its members. No society is free unless the last and the least in it is free.

No wonder, this is what former Supreme Court Justice late V R Krishna Iyer had to say "In India, a socialist, secular, democratic republic, is over a billion strong and is perhaps the world's first in its ancient heritage, second in primitive poverty, third in contemporary crimes, twelfth in total wealth. In the context of institutions and the developmental dynamics desiderated by modern technology, India can be a Kohinoor diamond and can be rich in resources if creatively catalysed. Yet, is a frustrated fraction of mankind because of environmental, colonial, corrupt, and stultifying contradictions. Our creative statesmen can transform the country if they wished for Feudalism, Capitalism, and Marxism to co-exist in a *Bharat* which is plunged into widespread socialist injustice. Perestroika and Glasnost and a do or die struggle for systematic transformation are the militant urgency of the hour as we were celebrating 60th Independence Day". Don't these provoking thoughts of Justice Iyer reflect the unease in growth? We surely need to address it and address it quickly, consciously, transparently, and from many fronts.

It is not that the past heritage of a people does not matter. Of course, it does, and a great deal too. The past should not, however, be deemed a haven of regression, lest the past itself is belittled. It is self-demeaning for an individual to boast, that I have a great future behind me. It is unfulfilling to anchor the pride of a nation in past achievements alone. It is in old age that a man waxes sentimental about his past. The past should be more like a seed; sown to sprout, grow, blossom and fruit today and provide the seed for tomorrow. The prospect of superior breeds being evolved, via hybridization, depends on this. The past is the domain of what is already known. It holds nothing but the given. It is very reassuring. George Wilhelm Friedrich Hegel said sarcastically, "nothing else will come out but what was already there."

Where does progress stand in the light of the above? What is the dynamic of development? Is it not the painstaking quest for the new and the not-yet born? Is that possible except in a culture of freedom? Walter Benjamin wrote, "Humankind is like a bird, perched on a mountain, with its face turned back to the past, and its wings out-spread. The winds of change are working up an irresistible momentum beneath. Religion is politics without that wind under its wings. It deflects attention from the need for historical dynamism with fanciful flights to the next world or next birth. Seen in this light, it is a disservice to modern democracy to run its politics like religion.

We can call it patriotism or label it nationalism. Perhaps, see it as nothing more than collective euphoria. But it is something we feel only once in a while. The uplift in national sentiment that we experienced immediately after our improved Olympics performance might have started to ebb, but the extent and nature of those emotions need to be better understood for they say something about what is worth holding on to.

What made us feel so good about a fellow Indian winning the gold at an event we have otherwise no interest in? Why did a weightlifter from Manipur move us so strongly by coming in second? And what was it about the women's hockey team that made us rise up as one to applaud their grit and passion even as they failed to win a medal?

For once, there were few discordant voices. After a long time, the nation spoke and exulted in unison. It was, at one level, a sense of belonging so deep that it overwhelmed other considerations. Watching the javelin event, one found oneself screaming and

shouting muttering encouragement to Chopra and willing his competitors to fail, in a show of emotion that has no parallel otherwise in one's life.

As India enters its 75th year of Independence, we must set the goal of bringing genuine prosperity to all by the 100th year. But the occasion is also an opportunity to introspect why India has not achieved this goal already. After all, 75 years is a long time and some countries have become prosperous in less than this time. It's high time that we should swing into action on multiple fronts and initiate a slew of bold measures to catch up with the lost time, by displaying a great vision to rejuvenate our beloved motherland.

More than 70% of Indians were poor in 1947. What's been the best antidote for that pervasive distress? That we have grown into the world's sixth largest economy. This upliftment is thanks to post-1991 reforms---the mistaken socialist direction of our early decades served us cruelly ill. But with two years of income growth lost and indicators from poverty to malnutrition trending up a second major reboot of the Indian engine is now critical. Tinkering at the margins is a poor substitute.

While it is true, as historian Mukul Kesavan says "Most of these 75 years of uncertain change, it was possible to think of this nation inaugurated on 15th August 1947 as an inspiring project, simply because its ambition was both awesome and so benign. For the first time in the history of the modern world, a country was going to undertake economic modernization under the auspices of mass democracy. But 75 years down the line what is the story? Isn't it a profoundly mixed story of bungled governance and missed opportunities?"

India is capable of bringing a new paradigm of what it means to be successful in terms of creating well-being. India has to go for the big leap. There is no other option but to grow. If we do not grow, we face a demographic disaster. It's time to turn to the last word of the Rig Veda -- *Sanghachadwam*! Lets progress together. This word is the ultimate essence of unity. It's a commitment, a call to move together not just at the physical level, but also at the levels of thoughts, feelings, and consciousness. And that has been the core of all common and popular prayers of this nation. A longing to move from untruth to truth; from darkness to light and from death to immortality is the spirit of "*Asato ma sadgamaya*" –where else can we find a more inclusive wish for well-being than the meaning of

"*Sarve bhavantu sukhinah…*" This elementary prayer wishes happiness, goodness, and freedom from misery and pain for all.

We should dream for India to bring about a wave of spirituality, a wave of happiness everywhere. Whenever possible, whether it be the villages or the cities, people's faces should glow with happiness. This will not happen by acquiring wealth alone. India has such profound knowledge of spirituality that is capable of transforming lives permanently. Yet, we have not valued and honored our own heritage and the spiritual legacy that we have in our country.

We are sitting on top of a golden treasure, yet we have been ignorant about it. We look down upon it rather than upholding it with honour and promoting it. We need to expand our sense of belongingness with everyone around us. There is something unique about this soil, which despite many obstacles has always remained the abode of great souls.

India is the oldest civilization in the world. A land of amazing contrasts, an exotic and mysterious land, a land that never ceases to amaze all of these statements equally sum up India. Spirituality seeps into every facet of Indian life and down through the ages. India has set forth the message of peace, love, and truth. India's national flag with its tricolor of deep saffron, white and green clearly conveys India's commitment and adherence to spiritual values. The colour saffron on the flag stands for courage, sacrifice, and the spirit of renunciation. White for purity and truth, green for faith and aspiration. In the center of the white band on the flag, there is a wheel in navy blue to indicate *Dharma Chakra* or the wheel of law. Hence, Sri Chinmoy rightly said about the true gold wisdom as:

India, The Golden Bird
Her Spiritual Values and Scriptures.
India is not just a place
India is not just a people
India is the celestial music
And inside this music
Anybody from any corner of the globe
Can find the real significance of life.

-Sri Chinmoy.

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Educational Thoughts of Sri Aurobindo

Sunil Behari Mohanti*

Sri Aurobindo (Aurobindo Ghose) was born on 15th August 1872 at Kolkata and passed away on 5th December 1950 at Pondicherry. Although his mother Swarnalata Devi, was the daughter of Rajnarain Bose, a great patriot and visionary, his father Doctor Krishnadhan Ghose was a strong believer and practitioner of western culture. To get moulded by British culture, when only 5 years old, Sri Aurobindo had to be away from his parents to study for 2 years in Loretto Convent, an English medium school in Darjeeling, West Bengal.

Education in England

When he was seven years old, in 1879, he was sent to England for better education. He had his initial education from Mr Drewett, an accomplished Latin scholar, in whose house at Manchester, Sri Aurobindo stayed. After getting private coaching for 5 years, in 1885, Sri Aurobindo joined St. Paul's School in London. In 1989, with a senior classical scholarship, he joined King's College at Cambridge. Till 21 years of age, he had his education at schools and colleges in England. Towards the end of his stay in England, he used to receive letters from his father reporting about British atrocities in India and also from his newspapers in which news about the atrocities was underlined. During his stay in England, he took part in patriotic activities such as participation in the deliberation of Indian Mujlis a political association of Indian students and in the activities of a society called *'Lotus and dagger'*, which sought the liberation of India. In 1890, he cleared the written test for the Indian Civil Service. However, he was disqualified as he could not clear the horse-riding test.

Return to India

Just after being disqualified for ICS in London, Sri Aurobindo had a meeting with the then Gaekwad of Baroda Maharaja Sayaji Rao, who recruited him for a civil servant job. Just before the arrival of Sri Aurobindo in Bombay port in February 1993,

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* *President, All India Association for Educational Research, Flat 1, Beatiude Apt 2, 61B Selvaraj Chettiar Street, Vaithikuppam, Pondicherry-605001. E-mail:sunilmohanty@gmail.com*

his doctor father, who had hoped to see his British-educated son work like him as a loyal British servant passed away in a heart attack, getting wrong news that the ship on which Sri Aurobindo was travelling sank in the ocean.

Baroda Stay (1893-1906) Providing Initial Experience of Indian Spirit

Sri Aurobindo stayed in Baroda for 13 years from 1893 to 1906. This stay provided an initial experience of the Indian spirit. Initially, he worked as an officer under the Maharaja of Baroda. Later he joined Baroda College and taught English and French. For some time, he worked as Vice Principal and as Acting Principal. During his stay at Baroda, he studied Sanskrit, Bengali and several other Indian languages. He got himself initiated into Indian literature, translated parts of the epics, and works of Kalidas and Bhartrihari into English, and wrote original poetry and plays. During his stay in Baroda in 1904, Sri Aurobindo started the practice of *pranayama,* learnt from a friend. He used to do pranayama every day for about three hours in the morning and two hours in the evening. He said that this practice helped him expand his mental power. Before starting pranayama, he used to write eight to ten lines per day, but after starting *pranayama,* the pace increased to two hundred lines per day. In 1908, he also was helped in his pursuit of *yoga* by a Maharashtrian yogi-Vishnu Bhaskara Lele. During his Baroda days, Sri Aurobindo did not want to be exposed to his political activities and the Bengal partition of 1905 forced him to come out in open. Das (2020), mentions the impression of Mr A. B. Clarke, the then Principal of Baroda College, under whom Sri Aurobindo worked as vice principal. Dr C. R. Reddy, the Vice Chancellor of Andhra University, Waltair (Visakhapatnam), in his address during an award ceremony for honouring Sri Aurobindo, in absentia recounted Mr Clarke's words: "So, you met Aurobindo Ghose. Did you notice his eyes? There is mystic fire and light in them. They penetrate the beyond. If Joan of Arc heard heavenly voices, Aurobindo seeks heavenly visions."

Life in Kolkata

His political writings under the title 'New Lamps for Old' appeared in Indu Prakash from Mumbai creating a stir in the political circle. In 1906, he left Baroda and came to Kolkata. He took charge of the national college set up by the National Council of Education. Side by side, he also edited *"Bande Mataram,"* a newspaper launched by Mr Bipin Chandra Pal. In 1907, the Government of British India, prosecuted sedition, the *Bande Mataram* and Sri Aurobindo as its editor. On May 2, 1908, Sri Aurobindo was arrested and was lodged in Alipore Central Jail in Kolkata from May 5, 1908, till May 6, 1909. Sri Aurobindo, before acquittal, had to face trial for a year. During his confinement, the publication of *Bande Mataram* was stopped. After acquittal, Sri Aurobindo started an English weekly, the *'Karmayaogin'* followed by a Bengali weekly, the 'Dharma'. Confinement in a cell in the jail worked for the revival of his yogic pursuit that was initiated during his stay at Baroda.

From Calcutta to Pondicherry (Puducherry)

Before coming to Pondicherry, while at Calcutta, in January 1901, Sri Aurobindo had given an interview to a Tamil newspaper 'India', published from Pondicherry. The correspondent wrote, "He lived a very simple life and put up an ordinary appearance with his *dhoti* and shirt, but his eyes were afire with grace, and knowledge and a halo of mysterious peace pervaded where he lived." The correspondent wrote that referring to his inner realisation in Alipore jail, Sri Aurobindo said, "Yes, I saw Narayan with open eyes and yoga is the way to realise him." While the Government in India as well as the British government were deliberating whether to re-arrest Sri Aurobindo for sedition, on getting an inner command, Sri Aurobindo left British India by boat from Calcutta for the nearby French pocket, Chandernagar. He did not have any political activity and remained incognito. After a few days, he got an inner call to go to Pondicherry. He travelled from Chandernagar in the ship S. S. Dupleix and reached Pondicherry on April 4, 1910, accompanied by Mr Bijoy Kumar Nag. The names used by them were: Jotinder Nath Mitter and Bankim Chandra Bhowmik. Earlier, Suresh Chandra Chakrabarti had reached Pondicherry on March 31, 1910. to make arrangements for Sri Aurobindo's stay by contacting Mr Srinivasa Acharya of the newspaper 'India'. During those days, ships could not come to the pier of the mainland. Passengers had to be brought by boat. Sri Aurobindo and Mr Nag were received and brought to the mainland by boat. They travelled by a horse-driven cart to the accommodation offered by Mr Calve Sankar Chettiar, a local businessman. British rulers of India did not pursue their mission to rearrest Sri Aurobindo, as they did not find any evidence of his political activity at Pondicherry. However, Sri Aurobindo could get written endorsement from five eminent gentlemen of Pondicherry - 1. Mr. Calve Sankara Chettiar, an honorary magistrate, 2. Mr Rassendren, 3. Mr De Zu Naidu, 4. Mr Le Beau, and 5, Mr Mrugesh Chettiar, which made his say legal for the French ruler of Pondicherry.

Sri Aurobindo refrained from active politics. However, he occasionally tried to give advice. One of his advice was to accept the Cripps proposal, which according to him, could have achieved a united India, free from British rule. He continued pursuing yoga, popularly known as 'Integral yoga' till he passed away on December 5, 1980, at Puducherry.

In 1928, Gurudeva Rabindranath Tagore met Sri Aurobindo at Pondicherry. Modern Review magazine of July 1928 quoted Rabindranath about his meeting, ' I said to him, "you have the Word, and we are waiting to accept it from you. India will speak through your voice to the world. 'Hearken to me!" (Das 2018, p.103). Sri Aurobindo was not in favour of partition. On August 15, 1947, Sri Aurobindo in his message said: "India, if she remains divided, will not herself be sure of her safety. It is therefore in the interest of all that union should take place. Only human imbecility and stupid selfishness could prevent it. Against that, it has been said, even the gods strive in vain; but it cannot stand forever against the necessity of Nature and the Divine will." (Das 2018, p.100).

Sri Aurobindo had many followers and the main one was Mrs Mira Alfassa, a French lady popularly known as The Mother. In 1926 Sri Aurobindo Ashram was founded after which Sri Aurobindo started getting himself isolated to give more stress on his *sadhana*. Sri Aurobindo was a spiritual leader and did not come out with a set of mental teaching or any fixed method of practice. There is no systematic instruction in yoga, meditation or gathering. There is collective meditation five days a

week, Monday to Wednesday and Friday at Ashram main building for 35 minutes from 7.20 to 7.55 P.M. and at the playground on Thursdays and Sundays from 7.45 to 8.15 PM. Ashramites are free to join any activity. All Ashramites are encouraged to take part in year-round physical education activities and in the annual physical education demonstration held on the 2nd December of each year. There is no dress code for Ashramites. However, there is a dress code for participation in physical education. This rule is also applicable to students of Ashram's centre of education. Ashram at Pondicherry refers to the building that has *Samadhis* of Sri Aurobindo and The Mother. This building is surrounded by public roads on all sides and is located near the French consulate, Pondicherry Secretariat and Raj Bhavan. After Sri Aurobindo, his Mother continued to keep the *Ashram* running. After The Mother, the ashram is managed by a trust board, there is no single authority.

The Mother founded Sri Aurobindo International Centre of Education at Pondicherry and much later founded Auroville, an international township for peace, harmony and spirituality located near Puducherry, in the state of Tamil Nadu State. She also coined the term "Integral Education", which was based on the educational thoughts of Sri Aurobindo.

Writing about Sri Aurobindo as part of the 'Thinkers on Education Series' published by the UNESCO and the International Bureau of Education, Geneva, Switzerland, Raina (2000) mentioned that Sri Aurobindo's major theories relate to (a) paradox of the national life of India, (b) supposed conflict between spirituality and action, and (c) the evolution of man. Sri Aurobindo conceived of education as an instrument for the real working of the spirit in the mind and body of the individual and the nation (Raina, 2000).

Sri Aurobindo was involved in the early stages of his career in the education system as part of his work as a teacher and as a principal during his stay at Baroda. Later he was involved in the system as a principal of the National College, at Calcutta which had been established to provide education to Indian youth in the S*wadeshi* line of thinking. Sri Aurobindo's views on education were published for the first time in 1894 in the journal *Indu Prakash* of Bombay. His last article was published in 1949 in the Bulletin of Physical Education of the Ashram. As per available records, on January 15, 1908, Sri Aurobindo delivered a speech on National Education at Goregaon, Bombay. On February 12 - April 2, 1910, his manuscript "A System of National Education" appeared in the *Karma Yogi*, a weekly review directed and mostly written by him. Sri Aurobindo, during his stay at Puducherry, was not involved in direct formal teaching but he continued to give his views on various aspects of education through his writings.

Thoughts on Education

Aims of Education

According to Sri Aurobindo, the chief aim of education is concerned with helping the growing soul to draw out that which is best and make it perfect for noble use (Sri Aurobindo 2003a, p. 384). According to him, the new aim of education is to help the child to develop his/her intellectual, aesthetic, emotional, moral, and spiritual being and his/her communal life and impulses out of his/her temperament and capacities. This is very much different from that of the old education which was simply to pack so much stereotyped knowledge into the resisting brain of the child and impose a stereotyped rule of conduct on his/her struggling and dominated impulses (Sri Aurobindo 1997a, p.45). Acquiring various kinds of information is only one and not the chief of the means and necessities of education. Its central aim is the building of the -powers of the human mind and spirit. Education should aim at the formation or, preferably, the evoking of knowledge and will and of the power to use knowledge, character, and culture (Sri Aurobindo 2003a, p. 420). Sri Aurobindo believed in the importance of child-centred education. According to him, the child is a potential learner. There is a certain amount of innate knowledge in every child. Sri Aurobindo discarded the old method of packing stereotyped knowledge into a child. Storing information in a child does not help much in developing intelligence. Education is traditionally seen as indoctrination. Generally, every child is indoctrinated in the manners, habits and even in the process of learning. Poor teachers give stress on the acquisition of information. Bad education systems have public examinations that give stress to memorization. These do not test the power to apply knowledge in varieties of situations. This process does not make every child develop skills of applying

the acquired knowledge. Thus, the educational process often overlooks the true and innate abilities. It develops a false coating on the child resulting in huge wastage of time and energy. Not only intellectual but also aesthetic, moral and spiritual development should be achieved. Stress must be laid on the development of powers of the human mind. As the innate powers vary from learner to learner, so also the process varies. Education should ensure free and natural growth for the learner.

True Education

According to Sri Aurobindo, a true and living education helps to bring out to full advantage and makes ready for the full purpose and scope of human life all that is in the individual man. It also helps the individual to enter into her/ his right relation with the life, mind and soul of the people to which s/he belongs and with the great total life, mind and soul of the humanity of which s/he himself is a unit and his people or nation, a living, a separate and yet inseparable member (Sri Aurobindo 2003a, p. 425). Three points of concern in an education system are the individual, the nation or people and the universal humanity. The individual learns for his/her development. Society consists of individuals. Each society has its norms of behaviour. Some of these may be universal and some may be specific to society. Each society supports educational institutions and their functioning. A nation consists of various societies. The development of individuals who are members of a society leads to the development of society as a group. The development of individuals and various groups/societies lead to national development. Just as societies play a vital role in education, the nation also plays a vital role in making provisions for education. The rate of individual development gets accelerated depending on the rate of national development. Again, the world consists of various nations. Development of the world leads to the development of individual nations and *vice versa*. Hence, an education system needs to be concerned with international development. An ideal education will allow the individual to make its one central object, the growth of the soul and its powers and possibilities. It shall make the nation keep in view on priority the preservation, strengthening and enrichment of the nation-soul and its *Dharma* and raise both into powers of the life and ascending mind and soul of humanity (Sri Aurobindo 2003a, p.427)**.**

It does not lose sight of the highest object of the human being, the awakening and development of his spiritual being.

Scientific Education *vs* Liberal and Spiritual Education

True education brings out all that is best, most powerful, most intimate and living like a human being. The mould into which his/her action and development ought to run is that of his/her innate quality and power. Sri Aurobindo did not approve of limiting education to information. Information can be only the starting point. Education should strive to develop various faculties of memory, judgment, imagination, perception, and reasoning, which build the edifice of thought and knowledge for the knower. These aspects must not only be equipped with their fit and enough tools and materials but trained to bring fresh materials and use more skilfully those of which they are in possession (Sri Aurobindo 2003a, p.370).

A rational education carries out three functions. It helps in (a) acquiring techniques of observation and acquiring facts on which judgements must be made; (b) training the learners to think fruitfully and soundly; and (c) enabling the learners to use their knowledge and their thought effectively for their own and common good (Sri Aurobindo 1997a, p. 198). Ideal education develops the capacity for action and high character in learners. According to Sri Aurobindo, the activity of human thought divides itself broadly into two groups of functions- Left-hand and Right-hand functions. The functions of the right hand are contemplation, creation, imagination, and the centres that see the truth. The functions of the left hand are criticism, reasoning, discrimination, inquiry, and the centres that judge the truth when it is seen. Scientific education gives stress on Left-hand functions and makes the thought keen and clear-sighted within certain limits, but narrow, hard and cold. Here comes the role of right-hand functions given stress by liberal education that broadens the base of human culture or enlarges the bounds of science (Sri Aurobindo 2003a, p. 438). According to Sri Aurobindo, the matter is an expression of the divine. There is life in matter. It could communicate. An effective education makes a synthesis of matter and spirit. The west has generally neglected spirit. The east, especially India and some other countries have neglected the matters. The Foundation of an

effective education should have its pillars rising from both aspects.

Yoga Education

Yoga is based on a system of psychology, very well applied in ancient India. Unfortunately, it has lost its ground in the country of its origin. It is now on its way back from the West. Yoga is very helpful for the development of the mind. It makes the mind quiet and silent so that it can receive pure knowledge directly. It also helps the individual to have control over his senses. It helps in *Chitta sudhi* and *Nadi sudhi*. Clairvoyance, clairaudience, presentiment etc. are the ordinary aspects of yoga. These achievements make the task of education much easier. A true yogi does not need outside aids, the teacher or the textbook, grammar and dictionary to learn a subject (Sri Aurobindo 2003a, p.375). According to Sri Aurobindo, yoga is the best medium of learning. On December 11, 2014, United Nations resolved to observe the International Day of Yoga. Since 2015, it is being observed each year on June 21 (Mohanty 2016).

Regional Variations in Education System

According to Sri Aurobindo, the education system cannot be uniform throughout the world. There must be regional variations. Each region has its distinct characteristics. Given this, the details of programmes must differ. For instance, the details of educational programmes meant for Asians ought to be different from those for Europeans. For instance, Sri Aurobindo says that Dharma as a basis for democracy is a concept suitable for Asia. It embraces both the concept of right and duty that is focused on the west (Sri Aurobindo 2002, p. 932). The educational system for a region of the world should be adapted by various nations in the said region. The national education systems should conform to regional and international broad guidelines.

National Education

According to Sri Aurobindo, each nation has a soul of its own. It has its distinct characteristics. It has specific past experiences. Hence, its path of progress cannot be exactly like with that of another. It follows that the details of its educational programmes cannot be the same as that of another nation. In a speech delivered at Nagpur on February 1, 1908, on the topic "Commercial and educational Swarajya", Sri Aurobindo pointed out that true national education is concerned not only with awakening the mind of the individual but also with carrying out the highest ideas of national activity which make the individual forget oneself and make him/her feel that s/he does not exist separately from his country (Sri Aurobindo 2002, p. 863 & Sri Aurobindo 2014, p. 64). The concept of national education grew up in the first decade of the last century. It may be noted that during British rule, Sri Aurobindo had left his teaching job in Baroda in Gujarat to join the national college at Kolkata. Sri Aurobindo however pointed out drawbacks of a national culture, a national religion, and national education (Sri Aurobindo 1997a, p. 301). These according to him, may still be useful things provided they do not interfere with the growth of human solidarity on the one side and individual freedom of thought and conscience and development on the other. The State has a positive and definite role to play in deciding guidelines for a national system of education. But often State goes for uniformity which destroys innovation and creativity. For instance, today in many States of the country, one finds common textbooks for all school classes forgetting the necessity of regional or local variations to be reflected in the curriculum. Hence, the nation keeping intact its quality control role needs to leave the details to individual institutions. It should not be the same curriculum for all the institutions, irrespective of their environment and the nature of the student population.

Indian National Education - Past and Present

According to Sri Aurobindo, ancient Indian education was of high quality, and it worked for the creation of better men. It was based on spirituality insentient system, besides providing thorough training in the necessary arts, sciences, and branches of knowledge given grounding in the Vedic formula of spiritual knowledge. However, the institution was far away from the life of cities, located mostly in forest areas. The teacher was also a spiritual leader. With the increase in population, the number of institutions grew, and it also brought in mass enrolment of teachers without taking care of their spiritual level. The education system became more intellectual and mundane, and the inner preparation of character and knowledge got neglected (Sri Aurobindo 1997b Vol. 20, p. 175). Sri Aurobindo referred to the past achievements in

form of artistic perceptions and the practical skill and fineness of eye and hand. This accomplishment resulted in the construction of the Konark temple, Taj Mahal, etc. In course of time, these skills were lost. The degeneration in education took place because of a grossly commercial, materialistic and insufficient European education. It destroyed the artistic perceptions and the plastic skill and fineness of eye and hand, which once gave Indian productions pre-eminence, distinction and mastery of the European markets. It had its content devoid of the spiritual and intellectual divorce from the past that beggared the nation of originality, high aspiration and forceful energy (Sri Aurobindo 1997e, p.245). There is a need not only to recover the lost spiritual and intellectual heritage, but also a need for build a greater culture. The mould that has been broken has to be reconstructed in larger outlines and richer content. Education should destroy the half-aristocratic and half-theocratic feudalism so that it can give vent to the democratic spirit of the Vedanta. It must throw away individualism and materialism and retain democracy. It must take care of the problems of harmonizing and spiritualising its impulses towards liberty, equality and fraternity, the cardinal principles of democracy. Democracy has been an achievement of the west. India must assimilate it. Sri Aurobindo disapproved of the system prevailing in the then universities, which ignored the psychology of man and loaded the mind laboriously with numerous little packets of information carefully tied with red tape. The methods used in this process damaged or malnourished the faculties and instruments by which the individual assimilates, creates and grows in intellect, manhood and energy (Sri Aurobindo 2003a, p.269). He did not want a return to the astronomy and mathematics of Bhaskara or the forms of the system of Nalanda that could be like a return from railway and motor traction to the ancient chariot and the bullock-cart (Sri Aurobindo 2003a, p. 420). He did not reject the past. He suggested that the past should help in laying the foundation; the present should provide the material needed keeping in view future possibilities (Sri Aurobindo 1910). While one should not completely reject the past, one should not restrict oneself to the strategies of the past. One must keep in view the past achievement, knowledge, character and noble thought in her immemorial past. Simultaneously, one must not forget to assimilate what other nations have contributed to the growth and development of humanity and the storehouse of knowledge. The most excellent methods of teaching that have been developed; whether the modern or ancient need to be applied. And all these we must harmonise into a system, which will be impregnated with the spirit of self-reliance. Education should aim at building up not machines, but men who must be fit to carve out a career for themselves by their brainpower and resource (Sri Aurobindo 2002, p.895). Hence, a truly national education not certainly ignores modern truth and knowledge, but takes our foundation on our being, our mind, and our spirit (Sri Aurobindo 2003a, p. 421). There is a necessity for studying the instruments of knowledge. There is also the necessity for finding a system of teaching that is natural, easy and effective (Sri Aurobindo 2003a, p. 383). There is thus an urgent necessity to reform the present system of education, which has remained the same in spirit as found in the first decade of this century

Universal Education and Role of the State

According to Sri Aurobindo, education is indispensable for every human being to make him/her a rational being. Universal education is the inevitable second step of the democratic movement in its attempt to rationalise human society (Sri Aurobindo 1997a, p. 198). The State must provide universal education till all the great nations stand on an equal level in this respect. At that time, the grip of the State on education may again relax and the duty of Education will again gradually devolve on local and private effort, the State confining itself to its fundamental duty in all matters of public concern, assistance, general regulation and the maintenance of a high standard. Sri Aurobindo pointed out that a large element of private and voluntary enterprise is a healthy element in the provision, of education. It is necessary for variety, life and progress as the State controls generality and a high standard of efficiency (Sri Aurobindo 2003a, p. 686). At the present juncture, the nation is moving perhaps on the right lines. There have been Stating sponsored IITs which stand as model institutions of Engineering admitting the most talented. Whereas, many engineering colleges admit students and the standard of these colleges is taken care of by the All-India Council for Technical Education. The quality assurance role of the National /state government needs to be strengthened to ensure quality. Sri Aurobindo

gave stressed on provision for universal education. According to him, a nation, which is unable to provide universal education, must suffer from stagnation and decay. The State provision should be there until the nation has come up to a desirable standard at par with other nations. At this stage, the State may depend on community involvement in education. However, the state must undertake steps to the maintenance of proper standards by providing general regulations and providing assistance to individuals and institutions.

Education for National Integration

National education is a must for national Integration. The country's unity has been threatened at times, but unity is the reality since this country must rise to become the leader of the world. Its unity is an assured fact. According to Sri Aurobindo, the more is the duration of foreign rule, the greater the force for the unification of the people (Sri Aurobindo 1997a, p. 308). The integrity of a nation is threatened by differences due to languages, religions, regions and communities.

Eclectic Approach

Sri Aurobindo pointed out the necessity of an eclectic approach to education. There are good points and bad points in past as well as present systems of education. One must critically examine them and come out with a system relevant to the specific situation or nation. The ancient civilisations possessed some secrets of science. certain aspects of which have been recovered, extended and made richer and more precise by modern science. There are still areas to be recovered (Sri Aurobindo 2003a, p.672). Gurudev Rabindranath Tagore tried to make a synthesis of western and eastern thought. *Yoga* is one of the Indian systems that have been getting more and more acceptance in the West. The scientific process of thinking is a contribution of the West that has been gaining more and more entry into the East. The occult sciences of clairvoyance, clairaudience, presentiment etc. have been accepted by several educationists in the West and time is not far when Indian educationists will invite these western educationists to talk to the Indian audience on occult phenomena. Knowledge cannot be restricted to a region –East or West. Hence, there is a necessity for an eclectic approach.

Psychology and Mental Education

According to Sri Aurobindo, "Psychology is the knowledge of consciousness and its operations."

(Sri Aurobindo 1997c, p. 305) Modern psychology is an infant science, at once rash, fumbling and crude. It is not complete. To be complete, it cannot limit itself to science. It must embrace metaphysical knowledge. It must accept the direct observation of mental operations by the mind without any regard to their physiological meaning, support, substratum or instrumentation. It must cover intuitive and experimental knowledge of the nature of the mind and its relations to the super-mind and spirit. A few years ago, some eminent psychologists believed the Indian system of psychology could provide an answer to some of the baffling situations faced by western psychology. The scientific method is based on observation followed by experiment and analysis. According to Sri Aurobindo, the European system of Psychology was just a pseudo-scientific system. In many instances, it was based on superficial observations, arbitrary terms and classification. Its spirit in many cases was abstract, empty and scholastic. Even, in recent times Western psychology has not been freed from the vices of the old system. The observations made have been incoherent, partial or morbid and abnormal; the generalisations are too wide for their meagre substratum of observed data; the abstract, and scholastic use of psychological terms and the old metaphysical ideas of psychological processes still bandage the eyes of the infant knowledge, mar its truth and hamper its progress. These old errors are strangely entwined with a new fallacy which threatens to vitiate the whole enquiry, the fallacy of the materialistic prepossession. (Sri Aurobindo 1997c, pp. 315-316). Sri Aurobindo pointed out the difference in instrumentation and the exact process involved in science and psychology. They vary as regards organic arrangement and functioning of the principles to suit the materials which they use and the objectives that they intend to reach (Sri Aurobindo 1997c, p. 316). According to Sri Aurobindo, Vedantic psychology explores the idea and intuition of a higher reality than the mind conceptualised in western psychology. Intuition can be accessed not by the normal action of the mind, but by higher psychological experiences. These may lead to constantly ascending intuitions verified by an ascent of experience to some summit of being (Sri Aurobindo 1997c, p. 311). Yogic psychology is involved in the process of an examination of nature and movements of consciousness (Sri Aurobindo 1997c, p.322). Yoga, as a psychology, is a more comprehensive tool than available in the literature

on general psychology. Yogic psychology easily accesses the hidden psychological world and its play of unseen forces. It can discover the nature and laws and movements of consciousness (Sri Aurobindo 1997c, p.323). Vedic or Indian Psychology uses various types of terms. According to Sri Aurobindo, what is generally known as consciousness is only the little visible part of the being. It is generally the ego and its visible nature. One ordinarily does not have access to the depths and farther depths and widths and ever wider widths which support and supply consciousness. The inconscient is greater, deeper, more original, and more potent to shape and govern than it is possible by Conscient. One must know inconscient so that one is aware of the nether regions and the origin of most of what one is and does (Sri Aurobindo 1997c, p. 317). There is a whole subliminal world of inner consciousness with many planes and provinces. This is the place of powers, movements and personalities. Without awareness of an individual, forces from this subliminal world observe and dictate speech, thoughts, feelings, and doings. Their action is even more directly than the Inconscient. According to Sri Aurobindo, there is a circumconscient Universal that pours its forces, suggestions, stimuli, and compulsions. There is a universal mind. The mind of an individual is a formation of the universal mind. The thoughts, feelings, will and impulses of human beings are drawn from this universal mind. Similarly, there is one permanent universal life (Sri Aurobindo 1997c, p. 318). Indian psychology refers to psychological concepts in the Vedas and Upanishads, which were developed and followed in India.

The Mind

Sri Aurobindo points out various ranges of the human mind. These are the higher mind, illumined mind, Intuitive mind, Over-mind and Super-mind. According to Sri Aurobindo, the utmost mission of the human mind is to train the obscure consciousness which has emerged out of the dark prison of matter, to enlighten its blind instincts, random intuitions, and vague perceptions till it becomes capable of this greater light. It acts as a stepping stone for higher levels of mind (Sri Aurobindo 2005, p. 136). According to Sri Aurobindo, the mind is the highest force in man. But it is an ignorant, clouded and struggling power. Even when most luminous it is possessed only of a thin, reflected and pallid light

(Sri Aurobindo 1997c, p. 262). The human mind is a clumsy interlude between Nature's vast and precise subconscious action and the vaster infallible supercontinent action of the Godhead (Sri Aurobindo 1997c, p. 255). According to Sri Aurobindo, the mind or *Antahkarana* consists of four layers: 1. Citta; 2. Manas; 3. Buddhi; and 4. A developing layer that includes the activities of genius.

The Thought Process

According to Sri Aurobindo, the activity of human thought can be broadly put into two groups of functions: Right-hand functions and Left-hand functions. The functions under the Right hand are Contemplation, Creation, Imagination, and the centres that see the truth. These are fostered by observation. The functions of the Left hand are criticism, reasoning, discrimination, inquiry, and the centres that judge the truth when it is seen. These are fostered through scientific and manual training.

Training of Mental Faculties

Sri Aurobindo points out the necessity of training the power of reasoning, the power of comparison and differentiation and the power of expression. These powers must be brought out in youth otherwise; they become rusted and stopped with dirt so that they cease to act except in a feeble, narrow and partial manner. The exceptional genius also needs training (Sri Aurobindo 2003a, p. 360).

Development of Skill in Observation

Education should develop the skill of observation. The children are efficient observers. Observation is an innate power. It needs to be fostered and perfected. It must be supported by appropriate judgment. Various types of exercises need to be provided to have a rough estimation of distances, speed, weight, etc. and then to be compared with reality.

Development of Thinking Skills

Education has the responsibility of developing the power of fruitful and sound thinking. Every learner has a large storehouse of imagination. The power of imagination must be fostered so that fruitful imaginations come up. One should not think uselessly. This is harmful to growth. Hence, from early stages, children need to be helped to develop the ability to think fruitfully.

Development of Power of Observation

The skill of observation is one of the fundamental skills necessary for mental development *(Sri Aurobindo 2003a, p.404).* As a part of the training process an individual need to develop the capacity of concentrating attention. Sri Aurobindo suggests that various objects can be taken for providing this skill. For instance, a flower can be taken as a tool of observation. Its different aspects such as the exact shade, the peculiar glow, the precise intensity of the scent, the beauty of the curve and the design in the form should be fixed in mind. The individual may touch it to get assured of the texture and its peculiarities. The flower, in the next step, should be cut into pieces for observation. The teacher's role requires not only to suggest action but also to put questions that may lead the individual to observe and investigate systematically.

Development of Intellect

The passive memory of the Citta, according to Sri Aurobindo, is a habit that circulates a restless flood of thought sensations rising of its momentum independent of the will and control of the individual (Sri Aurobindo 2003a, p. 400). Training of intellect is involved in making the individual skilled in dictating to the *Citta* appropriate *samskaras* or associations to be formed or rejected. This process involves discriminating, choosing, selecting and arranging. One must go for purification of the *Citta (Citta-siddhi)* so that the Citta does not add to the confusion in the mind channel by false judgement, false imagination, false memory, false observation, false comparison, contrast and analogy, false deduction and inference. This process is a process of yoga, whether one is aware of it or not.

Development of the Power of Memory and Skills of Making Judgement, Comparison, Contrast and Analogy

According to Sri Aurobindo, the next aspect of mental training is the training for the development of the power of memory, judgement, comparison and contrast abilities (Sri Aurobindo 2003a, pp. 405-406). As part of the process of developing memory, it is useless to make the student repeat lessons. Several noting made of similarities and differences in objects such as flowers, leaves, plants, and trees may be a more effective strategy. This may lead to the development of the scientific habit, the scientific attitude and the fundamental facts of scientific knowledge. This may be an initial step in the study of science. Similarly, the night sky may be used for the study of astronomy, observation of soil, stones, etc may form the study of geology, and observation of animal life may form part of a fundamental study of geology. The enthusiasm thus developed may help the learner to pursue these types of observations outside the formal classroom. These types of activities will automatically lead to the development of the skill of judgement in respect of measurement, appreciation of colour, sound, scent, etc. The teacher's role is involved in guiding the student in forming a correct judgement. Classroom discussion helps in systematising and clarifying the process of comparing. In discussion, the stress should be given to pointing out the level to which a learner was correct so that confidence is built in the learner. This process also leads to the development of the skill of analogy.

Development of the Power of Imagination

According to Sri Aurobindo, the power of imagination is a most important and indispensable instrument (Sri Aurobindo 2003a, p. 406). It can be divided into three functions, the forming of mental images, the power of creating thoughts, images and imitations or new combinations of existing thoughts and images, the appreciation of the soul in things, beauty, charm, greatness, hidden suggestiveness, the emotion and spiritual life that pervades the world.

Development of the Logical Faculty and Reasoning

According to Sri Aurobindo, there are three elements necessary to correct reasoning. These are: (a) The correctness of the facts or conclusions from which one starts; (b) The completeness as well as the accuracy of the data from which one starts; and (c) The elimination of other possible or impossible conclusions from the same facts (Sri Aurobindo 2003a, p. 408). The training of the logical reason must necessarily follow the training of the faculties which collect the material on which the logical reason must work. To deal successfully with ideas, the faculty of mind dealing with words should be developed. According to Sri Aurobindo, the logical faculty can be appropriately developed if the exercise is carried out first with things and then with words and ideas (Sri Aurobindo 2003a, p. 406). The students should be made interested in

the process of drawing inferences from the facts and tracing cause and effect. Then they should be led on to notice their successes and their failures and the reason for the success and the failure (Sri Aurobindo 2003a, p. 409). The role of the teacher is to make the students realise the incorrectness of the fact started from, the haste in concluding insufficient facts, the carelessness in accepting an improbable conclusion, little supported by the data or open to doubt, the indolence or prejudice which does not wish to consider other possible explanations or conclusions. The mind should have the experience of reasoning and its errors. It should be taught to observe - how these work for it. Its process should base on the principle of proceeding from the example to the rule and from the accumulating harmony of rules to the formal science of the subject, not from the formal science to the rule, and from the rule to the example.

Development of Attention - Multiple Concentrations

According to Sri Aurobindo, attention is the first condition of right memory and accuracy. To make the student attentive, the object of attention must be interesting. Attention to a single thing is called concentration. It is possible to develop the capacity to concentrate on several things at a time. There are powers of double concentration, triple concentration and multiple concentrations. The mind can be trained for equally distributed attention over a set of circumstances in such a way as to observe and remember each perfectly. This can be mastered through steady and natural practice (Sri Aurobindo 2003a, pp. 402-403).

According to Sri Aurobindo, to improve the performance of the mind, it is necessary to ensure the mind's immobility and thought-free stillness. Truth is seen well in the purity of the silence. It requires identity and silent vision. It cannot be realised in the noise and cackle of logical debate (Sri Aurobindo 1997c, p.255)

Development of Personality

According to Sri Aurobindo, memory is the basis of personality. The individuality or difference of personality is created by the difference in the nature and range of the impressions experienced and retained by the mind, which naturally results in different habits of emotional and mental reaction. There are differences in the human personality because of differences in the range of mental and emotional experience, from the different distribution of various kinds of experience, and differently developed habits or ways of reacting to impressions received. For character is nothing but a habit, and habit is nothing but an operation of the memory. The difference in experience depends on the difference in life, pursuits, and occupations (Sri Aurobindo 2003b, p. 289).

Development of Genius

Development of Genius, according to Sri Aurobindo, is not a freak, an inexplicable phenomenon. It is a perfectly natural next step in the process of evolution. The Universal Energy attempts to quicken and intensify the intellectual powers to prepare them for those more puissant, direct and rapid faculties which constitute the play of the supra-intellectual or divine mind (Sri Aurobindo 1999, p.13). It comes out from something deep within which calls down the word, the vision, the light and power from a level above the normal mind (Sri Aurobindo 1997d, p. 262). Its occurrence is independent of the environment. However, the environment provides sureness, verve, and stimulus and plays a positive role in making self-expression easy and natural (Sri Aurobindo 2003a, p. 98).

Free and Natural Growth of Learners

Education should aim at fostering the free and natural growth of learners. Sri Aurobindo states that it is necessary for genuine development (Sri Aurobindo 2003, p. 385). Every learner has a psychic being that cannot be the same as the psychic being of another individual. The process of development must vary from one individual to another. Hence, there should be ample scope for free and natural growth.

Spiritual Education

Spirituality is often taken as another name for religion. Many universities and education institution term their religious programmes as spiritual programmes. The United States has a Consortium for Spirituality in Higher Education, which is the umbrella for 1. The Initiative for Authenticity and Spirituality in Higher Education (IASHE), (2. Education as Transformation (East), and 3. The Community for Integrative Learning and Action (CILA) (Astin, 2004, p. 38). Many educationists view the term "spiritual" as identical to the term "religious." According to Sri Aurobindo, religion

is different from spirituality. Every human being needs to be broader than the widest horizons, loftier than Kanchenjunga and more profound than the deepest oceans. Highest spirituality indeed moves in a free and wide air far above that lower stage of seeking which is governed by religious form and dogma. It lives in an experience that is unintelligible to the formal religious mind (Sri Aurobindo 1997b, p. 179). Referring to the spiritual contribution of Asia, on March 28, 1908, Sri Aurobindo wrote in Bande Mataram: "The East has some knowledge of the truth, the East alone can teach the West, the East alone can save mankind. Through all these ages Asia has been seeking light within, and whenever she has been blessed with a glimpse of what she seeks a great religion has been born, Buddhism, Confucianism, Christianity, and Islam with all their countless sects (Sri Aurobindo 2002, p. 978).

According to him, India is the location of the grand workshop of the spiritual experiment. According to Belousa (2002), spiritual development strategies enable students and teachers to experience the deeper truths of existence. In 1993, in the United Kingdom, activities for spiritual development in students suggested by the National Curriculum Council (1993, p. 3) were: 1. Recognizing the existence of others as independent from oneself; 2. Becoming aware of and reflecting on experience; 3. Questioning and exploring the meaning of experience; 4. Understanding and evaluating a range of possible responses and interpretations; 5. Developing personal views and insights; and 6. Applying the insights gained with increasing degrees of perception to one's own life. Spiritual teaching is above religion: it strives toward a global truth. It is the teaching of the future life; it illumines the consciousness of the individuals and prepares the individual for the realization of his future. In the sphere of spiritual development, religious hatred, dogmas and rituals do not find a place: individuals learn to exist in peace, harmony, and tolerance. Spiritual education does not exclude the study of the physical world. It is self-developing and self-finding. It does not limit the use of knowledge of physical and psychical science for material human ends but uses the knowledge to know the working of the Divine (Sri Aurobindo 1997a, 256).

Teaching Techniques

Principles of True Teaching

Sri Aurobindo has mentioned about three principles of true teaching (Sri Aurobindo 1910, p.5).

The first principle of true teaching is that nothing can be taught. An ineffective teacher takes pleasure in carrying out the role of the taskmaster. S/he also takes pleasure in instructing. On the other hand, an effective teacher does not impose his/her ideas on the students. S/he suggests various procedures of learning to them. S/he gives freedom to them to choose the manner of learning. An effective teacher knows that s/he cannot train the pupil's mind. S/he applies the principles of lifelong learning and indicates to the students the process of learning and the place where the material to be learnt has been lying. The second principle is that the mind must be consulted in its growth. Generally, the parents or teachers develop idea ideas about the process of growth and development. They expect the student to grow up as an engineer, doctor, etc. This is an error. It affects the genuine development of the learner. It is a barbarous and ignorant superstition. The option must be in the hands of the concerned student. The student can be induced to expand by his/her own nature. The d principle is that education should be built upon experiences. It should start with the immediate environment and gradually move further. It should start with the present and basing on that should be on the future.

Methods of Teaching of Languages

Sri Aurobindo and the Mother have given the following suggestions on the teaching of languages. The teacher needs to make the child's mind get accustomed first to notice the word thoroughly, its form, sound and sense. The next step must make the child compare the form with the other similar forms in the points of similarity and difference. This helps in forming the foundation of the grammatical sense. The next step must be distinguishing between the fine shades of similar words and the formation and rhythm of different sentences. This strategy helps in forming the foundation of the literary and syntactical faculties. All this should be done informally, drawing on the curiosity and interest, avoiding set teaching and memorising rules (Sri Aurobindo 2003a, p.407).

The Teacher

Sri Aurobindo, in answer to a question relating to the Montessori Method of teaching, remarked that the teacher's influence is very much powerful. S/he may not directly guide or instruct but the influence keeps the children engaged. (Purani 1961, p. 137).

Sri Aurobindo and The Mother advocated the concept of the teacher, prevailing in ancient India. Such a teacher was a *yogi*.

Sri Aurobindo International Centre of Education, Puducherry

Sri Aurobindo International Centre of Education at the Sri Aurobindo Ashram, Puducherry is a laboratory of Integral Education. The Centre does not have any branches. Many schools are going under the name Integral Schools situated in Orissa and elsewhere. These are schools managed by persons connected with Sri Aurobindo's ideals. These schools are not branches of the Centre of Education at Puducherry. The Centre of Education was established as a school on 2nd December 1943. In 1951, Sri Aurobindo Memorial Convention was held at Puducherry. In 1952, the Ashram School was named as Sri Aurobindo University centre. In 1959, the word 'University' was dropped. The institution was named Sri Aurobindo International Centre of Education. All teachers in the Centre are members of Sri Aurobindo Ashram, Puducherry Ashramites or non-Ashramites volunteers. The Centre does not award any degree or diploma. The Centre is not affiliated with any Board or University. The Centre has been recognised by the Central Government as one of the five Institutions of higher learning of all India importance. The students completing higher course gets a Letter stating the subjects studied that has been recognised by the Union Public Service Commission as equivalent to a degree for various Central Government jobs and has been accepted by certain Central Universities for admission into PG Courses. The National Policy on Education 1986 suggested steps be taken for delinking degrees from jobs. Rabindranath Tagore also was not in favour of awarding degrees and diplomas to students of Visva Bharati. Afterwards, when it became a Central University, it lost its originality. It started awarding Degrees and Diplomas. The Sri Aurobindo International Centre of Education, Puducherry, being not one University in the formal sense of the term, does not have the compulsion for its decision not to award degrees and diplomas. Students mostly stay in hostels. There is only one dining room for the students and teachers. Non-vegetarian food is served here for those who want it. However, those who want can take food to the Ashram Dining Hall. The institution starts every morning at 7.45 A.M. with music played over the loudspeaker for teachers and students to concentrate. There is no formal mass vocal prayer. Class work continues till 11.30 A.M. with a break for 15 minutes from 9.30 A.M. to 9.45 A.M. and in the afternoon, the class work starts at 1.45 P.M. and continues up to 4.00 P. M. When necessary, teachers of dance, drama, music etc. also take classes during evening hours. The academic session starts on December 16 every year, but the students are to be present on 13th December to receive their books and other materials. The classes are not held from 1st November to 15th December. The physical education programmes provided at the Centre of Education at Puducherry are not exclusively meant for students. The teachers and students and the members of the Ashram community jointly participate in physical education programmes. They have also regular health check-ups. Wherever required, specific exercises are prescribed as per the medical advice. This is a unique institution in the country, which provides physical education on all days of the year. There are various groups, which have prescribed activities for different parts of the year. Physical education is provided on all days of the year. However, those who want to visit families staying outside Puducherry can do so during the period November1-December13 when there is no class work. The annual Physical education Demonstration takes place on 1st December and the annual drama is enacted on 2nd December. The month of November that comes under the rainy season is also utilised for training for annual physical education demonstration and practice for annual drama. The students at any stage are not to pay any tuition fee. They pay a sum of Rs. 500/- per year for their books and notebooks. The hostel charge is also Rs.500/- per month. The Centre has a rich resource for physical education including a swimming pool. Physical education classes are held in the afternoon hours. The Centre has also modern teaching aids including computers. A school teacher in the Centre need not possess any formal initial teacher training qualification such as B. Ed., Diploma for Teaching, etc. The medium of Instruction is French for Science students and English for Arts students. There is no formal classroom work on Sundays, on the 1st of each month, when the Ashramites receive their monthly quota of requirements and on Darshan days falling during the Session-21st February (Birthday of The Mother, founder of the Centre as well as of Sri Aurobindo Ashram, Puducherry), 29th February (Supramental day), 24th April (Final date of arrival of The Mother at Puducherry) and 15th August

(Birthday of Sri Aurobindo). X-Mas Day is observed on 25th December. There is flexibility in subjects of instruction in various classes. The progress Report of the students is sent twice a year. It does not mention marks awarded. It mentions the students' records in terms of 1. Ability; 2. Industry; 3. Interest; 4. Behaviour; 5. Attendance; and 6. Overall Progress. It also mentions periods allotted per subject per week and the name of the teacher.

For a few years, there has been provision for adult and continuing education programmes in the evening hours that are provided free. The programme is organised at the school building in the evening hours generally from 4.30 - 7.30 P.M. The Centre takes whatever services are offered by the members of the community. There are many volunteer teachers and other types of workers, who take joy in participating in various activities. For instance, gatekeeping is done by many volunteers for one to two hours a day including a lawyer and his headmistress's wife. The volunteer workers can go to the ashram playground to watch different functions including participation in meditation held on Thursdays and Sundays and film shows on Saturdays.

Free Progress System

The Centre adopts Free Progress System in higher classes. APEID (1976) reported on the importance of the free progress system practised at this centre, in its document on educational innovations in Asia. The Mother coined the term Free Progress system. In this approach, the students are free to listen to the talks given by a teacher or to pursue studies at the library. They are free to go to a teacher at the appointed time for consultation. Such a system applies to mature students, generally 14 years of age. The students get advice only when they seek these. Methods of teaching followed at the Sri Aurobindo International Centre of Education at Puducherry Methods of teaching followed at the Centre are the ideal ones cherished in the writings of educationists. There are many methods, which are theoretically taught to teacher-education students at various universities, but most of these methods are not demonstrated in action in training institutions. Consequently, they remain only in the passive memory of the teacher. These methods one finds in practice at the Centre. For instance, a few teachers in India use the project method. But this is very often used at the Centre. A few years ago, during a visit to Puducherry, the author came across such an activity at the Sri Aurobindo international centre of Education. The students of 10 years of age (class IV according to another school standard) had organised a 'Departmental store' as part of their study of Mathematics. Parents and Ashramites were invited as customers. On arrival at the store, the customers had to draw money from the 'bank' (one received pieces of plain paper with amounts written on them). With this money, one could make purchases at various counters, where articles of daily use-like soap, toothpaste etc. (represented by empty packets collected before by the students), clothes (represented by yarn), and fruits depicted in drawings were offered. The students at the Sales counter had with them a list of all articles and their rates. For the purchases, they had to issue receipts on which prices of various sold articles were mentioned. The further calculation was required while returning the balance money to the paying customer. This was the application of mathematics in day-to-day life situations. The methods followed at the Centre can be ascertained by making a personal visit to the Centre. In the case of science lessons for children, one finds the use of field trips and projects. The teaching of languages is also exemplary. For, instance, learning Sanskrit in many schools is very boring. One must get by heart grammatical rules and then go through Sanskrit texts. At the Centre, the teachers teach Sanskrit to preschool students through the direct method of teaching. One finds a boy or girl of 6 or 7 years of age comfortably talking with his or her friends in three or four languages- French, Sanskrit, English and the mother tongue. The teachers of languages whenever meet their students outside classroom situations also talk to them in the languages taught by them. Such learning of languages is also reinforced by the participation of students in dramas and other activities. The Mother advised the teachers not to follow the bad methods found in certain universities outside. The teacher should not try to pump in mere data and information into students. There must be stress on the development of understanding. The ideal teacher should not be in a hurry to finish the course. Thus, the method of teaching followed at the centre is truly child cantered and aims at bringing out the best in the child. There cannot be standard methods of teaching. Each teacher must find out the method that suits himself and the concerned students. Good teachers discover suitable methods.

Conclusion

Sri Aurobindo's ideas on education coined by The Mother of Sri Aurobindo Ashram at Pondicherry as 'Integral education' has taken into consideration all the schools of educational thoughts. Integral education has five aspects: physical, vital, mental, psychic and spiritual. The efforts of the new education policy of the government may need modification to accommodate psychic and spiritual education and give more stress on physical and vital, education. While considering this step, one needs to remember that Sri Aurobindo was a spiritual person and his views on spirituality were above religions.

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Identity of Education and *Azadi Ka Amrit Mahotsav*

Chhaya Goel* and Devraj Goel**

Today we are celebrating *Azadi Ka Amrit Mahotsav.* Now India is an independent and Sovereign State. We have our constitution. We have Hind Swaraj. The Preamble of India is - A sovereign, socialist, secular, democratic republic State. We have our unique resolute and resilient Education System which surged through many stages for several thousand years and reached a stage where we see many accomplishments. The ultimate goal of Indian Education is the development of universal beings-- having healthy interrelation, interdependence and integration with all the entities of the universes, irrespective of their nature and location.

Even then there is chaos, why? It is because we were not focused on our actual Goal. Independence requires determination, identification, dedication, interrelation, interdependence and integration. Education sustains strength, vigilance and security. There is a need for both revival and modernization of our Education. We need Health Education, Peace Education, Humanity Education, as well as, Digital Education, Physical and Chemical Education, and above all Polity and Economics Education and Mathematics Education, both, differential and Integral. Along with arithmetic, we need algebra and GeoGebra. MRI Scanner Education, Aviation Mentoring and Monitoring Education and Image Processing Education are also desirable. Most of us have Psychological Problems right from Public to Politicians and Beggars to Capitalists. Our history is gone, the present is chaos and the future is uncertain. We need Civilization, as well as, Modernization. We need Innocence, as well as, Vigilance. We have learnt to live with Truthfulness, Compassion and forbearance, come what may. We believe in giving and forgiving, be it Goods and Service Tax or Birth and Death Tax.

We have been trying to meet our predicaments of elementary education, secondary education and

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* Former Professor of Education, Maharaja Sayajirao University of Baroda, Pratapgunj, Vadodara- 390002 (Gujarat)
**Professor Emeritus, Res: 204- Avasar Flats, 2- Pratap Ganj, Vadodara- 390002 (Gujarat). E-mail: goel_d_r34@rediffmail. com

higher education through SSA, RMSA and RUSA. There have been many a move right from facilitating the first transition of a child from home to pre-school and from graduation to profession. But the basic question lurking is what after degrees? Let us ask any young graduate, today, that what the fellow is doing. Very often the response is NOTHING. What do we intend to do? Do Not Know. Even a sizable number of Engineers who have been serving for more than a decade are dislocated. Why? We are blindly adopting the western culture of Hire and Fire. What has gone wrong with us?

Indian Education has been unique. The globe as a whole liked to emulate Indian Education, teachers, and learners. 11th of November is celebrated as National Education Day, whereas, the 5th of September is celebrated as Teachers' Day in India commemorating the Birth Anniversary of Maulana Abul Kalam Azad and that of Sarvepalli Radhakrishnan, respectively. Also, we celebrate Guru Purnima (AASHDH Month PUNAM) commemorating the Birth Anniversary of Maharishi VED VYASA!

Historical Perspectives of Indian Education

Historical perspectives of Indian Education can be viewed through the study of the following:

1. Vedic Education

2. Buddhist Education

3. Medieval Period

4. Wood's Dispatch 1854

5. Lord Stanley's Dispatch 1859

6. Indian Education Commission 1882

7. Government of India Resolution on Education Policy 1904

8. Government of India Resolution on Education Policy 1913

9. Calcutta University Commission 1917

10. The Hartog Committee Report 1929

11. The Abbott Wood Report 1937

12. The Sergeant Report 1944

13. The University Education Commission 1948-49

14. The Secondary Education Commission 1952-53

15. The Kothari Commission 1964-66

16. National Education Policy 1968

17. The Curriculum for the Ten-Year School, a Framework 1975

18. Chattopadhyaya Committee 1983-85

19. National Policy on Education 1986

20. National Curriculum for Elementary and Secondary Education, a Framework 1988

21. The Acharya Ramamurthy Committee 1990

22. National Curriculum Framework for School Education 2000

23. NCF 2005

24. NCFTE 2009

25. Justice Verma Commission 2012

26. NEP (2020)

All the Committees, Commissions and Curriculum Frameworks over centuries have made fully valuable and functional recommendations, but where is their expression in Indian Education? It seems Education has no identity of its own.

Developments in Indian Education

Some of the developments in India post-independence are as follows:

- Sarva Shiksha Abhiyan (SSA)
- Right to Education (RTE)
- National Programme for Education of Girls at Elementary Level (NPEGEL)
- Rashtriya Madhyamik Shiksha Abhiyan (RMSA)
- Inclusive Education for the Disable at Secondary Stage (IEDSS)
- Saakshar Bharat/Adult Education
- Rashtriya Uchchatar Shiksha Abhiyan (RUSA)
- NROER- National Repository of Open Education Resources: It is an initiative of the MHRD, GoI and CIET-NCERT to bring together all digital and digitise resources across all stages of School Education and Teacher Education. Resources are available in 29 different languages. E-resources of NROER can also be accessed offline through the school server.

- pathshalala website and Mobile App

- e-PGPathshala: It is an initiative of the MHRD under National Mission on Education through ICT (NME-ICT). The modules for M.Ed. and M.A. Education are being developed jointly by the University of Allahabad and CIET-NCERT. These modules will be available on the following websitess:

  http://epgp.inflibnet.ac.in

  http://eacharya.inflibnet.ac.in

  http://nroer.gov.in

- SWAYAM- Study Webs of Active-Learning for Young Aspiring Minds

- SWAYAM PRABHA- The SWAYAM PRABHA has been conceived by the MHRD, GoI as the project for using the two (2)-GSAT-15 transponders to run 32 DTH channels which will telecast high-quality educational programs on 24X7 basis. Every day, there is new content oforat least 4 hours which is repeated 6 times a day. MHRD has nominated NCERT as the National Coordinator for one such channel. CIET-NCERT is disseminating curriculum-based ETV programmes for classes IX-X and XI-XII through DTH –TV transmission.

- PM eVIDYA: It is an innovative and unique initiative by the Ministry of Education, Government of India to facilitate learning and teaching at the school level. It offers multifarious educational resources in multi-platform mode viz. digital/online, TV, radio, community radio, podcast etc. Multi-modal components the of PM eVidya initiative are:

  - DIKSHA as One Nation- One Digital Platform, hosts plenty of multi-modal education content free for the use of learners, teachers and any stakeholder working in the field of education.

  - 12 TV Channels: One of the major components of the PM eVidya initiative is 'One class- One channel where 12 DTH television channels are dedicated for the transmission of education contents classes 1 to 12 based on NCERT curriculum.

- MOOCs for PG Students UGC is the National Coordinator for the development of MOOCs for non-technical post-graduate degree programs. CIET, NCERT is developing MOOCs for the subject of Education. The courses developed so

far have been hosted on SWAYAM. A learner can earn certificate/credits on successful completion of any course on SWAYAM.

- NISHTHA, that is, National Initiative for School Heads and Teachers Holistic Advancement

- Revision and digitization of all the books of the NCERT

- Elementary Learning Outcome Document of the NCERT

Identity of Education

Some of the Universities in India, both, old and new, such as the University of Guwhati, University of Mumbai, and Ravenshaw University are conferring Doctoral Degrees in Education under the Faculty of Arts. Education is not even considered by them an entity and faculty or discipline. Education which is unconditional greatest Service in Society has not been recognized by the Service Sector in India. UPSC in India has failed to include Education as a discipline. *Some think that Education has only a little core, but, more of a periphery. Education suffers from the missing elements of unique discipline which are non-replicable in other* disciplines. It seems that such thinkers have failed to think and appreciate that Education is the core of every discipline. Education is interdisciplinary. All the disciplines emerge from Education and merge into Education. Education does have a unique body of knowledge, a repertoire of unique skills and attitudes and a code of conduct. The code of conduct of doctors is "We will keep serving humanity without considering our comfort or discomfort." Similarly, the code of conduct of an Educationist is –"We will strive for Integral Humanism and Universal Being." Some may use and abuse GURUS, Guardians, Teachers, Masters, recursively, ridiculously; forgiving every misdeed, they will be nurtured, so that, they make Teachers their Patterns to Live and to Die. If we find some people worried about ARTH and KAAM and callous towards DHARM and MOKSH, we will persuade them to initiate correction." Can we estimate the energy, purity and strength of the Soul of Education? Warriors may win at times physically, it is Education that only through knowledge can bewitch the minds and liberate the souls. We always feel proud of the teachers who taught us and who are teaching us. Their text is its own testimony. They do not require testimonials. The globe strives to emulate Indian Teachers and Learners.

Developmental Challenges of India

We have many a developmental challenges, such as, Assimilating the globalization, Continuous updating of Knowledge and Skills, Creating new age institutions, Balancing materialism and values of orient, Phantom use of Resources, Trans-planet technology stabilization, Working with multiple languages and multiple cultures, Meeting the climatic and environmental challenges, Sustaining development, Collaborative Living, Wholistic development, Developing Vocational Skills, Enhancing Communication Skills, Quality control, Removing Public Private dichotomy, Controlling Rising materialistic values, Realizing even distribution, Controlling Ecological imbalances, Fair Recognition, Valid Accreditation, Sustaining Symbiosis, Respecting Cultural Heritage, Sustaining sensitivity to the basic values, Convergence of State, Society, Education and Judiciary, Respecting Rights of all, Transcending time, space and mind, India which has had the grace of being contented, peaceful, healthy, happy, beauteous, cultured society is moment by moment losing its natural bliss and beauty, We have become insensitive to our Indian Heritage of peaceful struggle, Each one of us needs to recreate, revive and refresh ourselves wholistically to value our heritage and build a Strong, Powerful, Cultured, Dedicated, Gracious and Pioneer India.

Structure of Education

Education has become stagnant over years, rather, there is a degeneration of Educational Institutions. There is no change in Names, in Structures, in Functions, whereas, there is drastic change in Society and Environment. When will we start renewing our own selves? Every unit in Education should renew itself. We cannot overthrow Education System overnight. Our Education Policy should resonate with our challenges and strengths, sources and resources, sensitivities and sensibilities, Vision and Mission. Our Education Policy should be guided by the Soul of our Soil.

ICT integrated Education: Some Innovations

- Flipped Classrooms
- Data Clouding

- Virtual Classrooms
- Digital Degrees
- World on Wheels: Digital Inclusion and Learning Labs
- Common Service Lab: Offgrid Citizen Assistance Lab
- Future Classroom 2.0: Offgrid Digital Learning Lab
- Curricula for ICT in Education (For Teachers and Learners)

Features of Some of the Innovative Programs

- **Personalized Teacher Education (DAVV, Indore)**
- Choice of Volunteers
- Learner-centreded
- Personalized Classroom Setting
- Participatory Approach
- ZLP
- Freedom for what to study, how to study, when to study, where to study
- Peer Teaching-Learning-Evaluation
- Variety in the modes of presentation
- Successive Discussions
- Evaluation by Self, Peer and Teacher
- Emergence of Humanistic and Professional Masters
- **Wholistic Teacher Education (CASE, Vadodara)**
- Subject Knowledge
- Inter-disciplinarity
- Environmental Attitude
- Health development
- Emotional development
- Spiritual development
- Integrated development
- Universe Development Index (UDI)
- **Problem Solving through Participatory Approach (DAVV)**
- The Master of Computer Education class, DAVV, Indore was very often given a problem to be solved through a computer program.

- Number of different programs would emerge from the entire class.
- Each program was presented by one of the programmers to the rest of the class and rated by all the students on different criteria, namely, compactness of source code, fetch and execute cycle size, response time, memory used, programming discipline level and program intelligibility.
- Also, the students developed a program to calculate Kendell's Coefficient of Concordance through 'C' language. They then computed Kendell's coefficient of concordance individual criterion-wise and with respect to the comprehensive criteria.
- There is a significant cognitive development through cognitively mapping the algorithms and solutions to a problem. This approach cuts across students of varied profiles, simultaneously. Participatory approach may be introduced in various disciplines to enhance learning in all domains. It facilitates creative production and independent thinking. Also, it provides scope to experience and appreciate the cognitive maps of others.
- **Development of Creative Writing Ability Amongst Students Through Participatory Approach (CASE)**
- Recitation of Model Poems by the Teacher in Class Situation
- Appreciation of the poem by the class and identification of the various components of creative composition
- Composition of a variety of poems by the students individually, and in groups
- Recitation of the self-composed poems by the classmates and appreciation by the rest of the class

The participatory approach of creative writing facilitates the expression of the latent creative faculties in terms of the original production.

Learner-Driven Pedagogy (LDP)

a. A Trainer Trains a Learner on Car Driving, particularly, on ABC, that is,

- Accelerator

- Brake and
- Clutch

A beginner was learning car driving in a motor driving school. The trainer would guide sitting by the side having the parallel ABC controls. The Trainer Designed, Driven and Dependent Pedagogy Failed the Learner, whereas, the Learner Self Driven Pedagogy Passed. Every learner has to experience accelerator, brake and clutch on one's own. The Sooner the learner realizes independence better the learning. Driving demands experiential learning.

But there are many problems with respect to LDP. Guides are readily available in the markets. Question Banks with solutions are available. It has become customary to copy and paste, without mental processing. Drill and Practice are negligible. Children are Programmed Round the Clock. Beauties of the Childhood are Lost. The booming Energy of the Adolescents and the vision of the Adults are Lost. There is rare Life in the Institutes of Education, but, added focus on life skills. There are many ways to address such problems.

Ways Out

- Technological De-Schooling
- Zero Lecture Program
- Participatory Approach to Problem Solving

- Activity Based Learning
- Employing Models of Teaching
- Theory Building and Employing
- Employing Taxonomy of Educational Skills
- Constructivism and Connectivism
- Training Thinking
- Wholistic Learning

Learner-Driven Pedagogy with Constructivism

- Here is a poem presenting learner-driven pedagogy (Table-1):
- Taxonomy of Educational Skills

Taxonomy of Educational Skills was developed (Goel, 2016). It is being offered as a course in some universities. (Appendix-1). Here are a few suggestions:

- There should be added focus on Learner Driven Pedagogy- Germination, Incubation, Creation, Construction and Connection.

- The identify of each and every Individual entity and Institution deserves recognition, otherwise, we seize to be. While being in a greater power, it takes no time to delete, but, it takes a lifetime to construct and connect. Any deletion has to be done more carefully, sensitively and sensibly. History has its own essence. It is not all gone.

Table -1 ABC of Learner Driven Pedagogy with Constructivism

Mere Trainer-Driven Pedagogy Failed Me Grossly as a Learner Accelerator-Break-Clutch and Gear Was Full of Diffidence and Fear	Fully Learner-Driven Pedagogy Passed Me Gracefully as a Learner Driving Easily in Any Direction With Confidence and Conviction
Driving demands knowledge of techniques Driving demands motor muscle skills Driving demands the concept of space and time Driving drives both body and mind	Driving tunes with multivariate setting Driving rules with multiple controls Driving has its own methodology Driving has its own Science and Technology
Driving drives Self and Vehicle Driving drives concepts and principles Driving is full of arrays of Skills Slight Negligence Bumps Hurts and Kills	Driving demands a Taxonomy of Skills Compatible Drivers, Ways and Vehicles Whether driving Man or Machine Driving demands Wit Will and Skills
Pedals With or Against Currents Lift Thrust Ailerons and Rudder Pedals Let us Drive Hills-Valleys-Plains all the Ways Up-Down Back-Forth Left-Right All the Days	Replacement of SMPS Insertion of CMOS Fixing of RAM Fabrication of Chips Spring Tide Sun Moon Opposite Side Drive Universe with Wit Might and Delight
Clouds in the Sky Rains and Storms Dew Drops on Petals Sweat of the Workers	Salute to Thee for Thy Grace Resonating Drive Always All Ways Electrons in Orbits Ribosome in DNA All the Entities in Wonderful Constellation!

- Any General Body, of any agency of India, if seeks public opinion on any issue, then the public opinion ought to be duly respected. If the public has faith in us, we should also have faith in the public. Truthfulness, Compassion and Forbearance are the most beauteous attributes of India. This is how India is known for ages.

- Courses, such as Corporate Social Responsibility and Education, Health Education in India, Taxonomy of Educational Skills, Technology Integrated Education, and Inclusive Education ought to be introduced.

- There should be added focus on Yoga Education, Health Education, Peace Education, and Humanity Education.

- Digital Culture should be developed right through Elementary Education.

- New Education Policy should ban Parallel Private Tuition Classes. The beauties of learning need to be respected. We cannot afford to mechanize learning.

- There should be a due focus on both the hard skills and soft skills in our Professional Programs.

- ICT ought to be fully utilized for sustainable development, that is, Socio-Economic-Environmental development.

- Media culture should emerge out of the media crowd. Due measures have to be taken to control media addiction. There is a need to develop e-civilization.

- Education should develop liberation capabilities through reason, religion and rapport, where, the reason is re-as-on knowledge, feelings and skills, because there is no ultimacy of knowledge, feeling and skills. Religion is to be one with the creator and Rapport is unconditional love for all.

- The Inter-University Consortium in Teacher Education established at the BHU should be fully functional respecting the ethos of the recommendation of the JVC.

- The Mahamana Madan Mohan Malviya Chair for Cross Border Teacher Education at the BHU should find expression at the operational level. The constituent e-consortium of Cross Border Teacher Education for the Common Wealth Countries should be established at the earliest.

- NCTE- the regulatory body in Teacher Education should be revived without further loss of time. The Chairperson of the NCTE should be appointed carefully.

- The *modus operandi* of the NEP (2020) should be worked out efficiently.

- India should immediately focus on Human Development Index and Nature Development Index.

- All the models like BOOT, BOO, and BOT have reasonably failed. There should be systematic efforts to integrate Technology into Education. Digital Culture should be developed more carefully.

- Elementary Education should be Elementary in the true sense. We should try our level best to revive and respect the beauty of childhood. Why should our children look like programmed machines?

- Some vocations should be mandatory with choice at Secondary and Senior Secondary levels.

- Higher Education has to justify its name as higher. Higher Education by virtue of its identity has to be Innovative. Higher Education should formulate and conduct Research on immediate problems.

- Digital Wave demands immediate Cyber Security. It is ideally desirable to be digital in all areas, but, such a wish and will demand immediate control. Along with, constructors and connectors the world is full of hackers and crackers.

- There should be an immediate focus on Bipolarity in Indian Education. Along with Education, our vigilance should be fully awakened, conscious and active.

- The NEETs should be more humanistic, both, in taking and organization. What could be the ways out:
  o Fair candidates.
  o Bio-meters and CCTV
  o Vigilant entrance.
  o A large number of invigilators.
  o Decentralized Test
  o Digital Testing
  o Open Book Test

- The UGC is a University Grants Commission. Instead of segregation into academic and financial divisions, we ought to expand and integrate the UGC.

Concluding Remarks

Today we are Celebrating 75 years of Independence. A thorough analysis of the theme reveals that had we been vigilant and conscious that no power of the universe, howsoever wild could rule us. But, how could they enslave us for centuries? It is a basic question for all of us. It is because we are very poor in History and Philosophy, as well as, Polity and Economics. The immediate response to this question is that we are negligent rather than vigilant. Our humanistic innocence was misused. Education and Education only which can sustain *Azadi.*

The ultimate aim of Education is the development of Universal beings. It deals in full, meaningful, happy, healthy, resonating and sustainable life of every organism and entity. There is a need to move from Human Development Index to Universe Development Index. There is a caution that progressively we are becoming market-oriented than society oriented, profit-oriented than service-oriented, and resource-oriented than source oriented. Technology quotient is trying to superimpose intelligence quotient, emotional quotient, spiritual quotient, health quotient, and environment quotient.

We are busier with the reviews than views. We are busier with deletion than construction and connection. It is high time that we revive our heritage and culture which is full of truth, compassion and forbearance. It is high time that we realize SHUBH LABH, that is, hard-earned Profit through determination and action with full immersion in seeking the beauties of life and living. The first and ultimate aim of Indian education is to realize universal beings. India is striving for wholistic development of all, where, each bud blossoms, blooms, and spreads fragrance. We feel proud being the product of Indian Education, where, we have the right to education. We have been constructed through the persistent patience, competence and struggle of our teachers. Our Educational Institutions have been and are the learning organizations in the prayer, in the classroom, in the corridor, in the library, in the laboratory, in the play fields, in the Health Center, in the community,

and everywhere. That is why the globe at large aspires to emulate Indian Education. There is an immediate need for Indian Education to strengthen and sustain its Universal Identity.

With all ifs and buts, Indian Education will continue serving the universe with all dedication, addressing all problems of all. New Age Institutions are being created and old age renewed for continuous updating of knowledge and skills, developing inner power and social ethos. There is progressively phantom use of resources. Symbiosis, peace and harmony, health and hygiene, production and Marketing, Scholarship and Exchange, indigenous creation and trans-creation, research and construction are becoming the salient features of Indian Education. Let us revive and modernize Indian Education. HAPPY AZADI KA AMRIT MAHOTSAV! Could we aspire for Indian Class Education which is service-oriented, society-oriented and Life oriented than Profit Oriented and Market Oriented? The biggest challenge of Indian Education is how to revive and sustain the identity of India. Jai Hind! Jai Bharat!

Appendix-1

TAXONOMY OF EDUCATIONAL SKILLS

Taxonomy of Educational Skills has been presented under the following 14 Domains:

1. Self-Development Skills

2. Social Skills

3. Life Skills

4. Critical Thinking and Training Thinking Skills

5. Research Skills

6. Constructivist and Connectionist Skills

7. Systems Thinking Skills

8. Information Age Skills

9. Leadership, Administration and Management Skills

10. Spiritual Development Skills

11. Yoga Skills

12. Wholistic Development Skills

13. Inclusive Education Skills

14. Universal Becoming Skills

1. *SELF-DEVELOPMENT SKILLS*

Category- I: Self-Development Skills

a. Monitoring one's own learning needs.

b. Locating appropriate resources.

c. Transferring learning from one domain to another.

2. *SOCIAL SKILLS*

Category-II: Interpersonal and Collaborative Skills

a. Demonstrating Networking and Leadership

b. Adapting to Varied Roles and Responsibilities

c. Working Productively with others

d. Exercising Empathy

e. Respecting Diverse Perspectives

Category -III: Communication Skill

a. Sender Analysis

b. Message Analysis

c. Receiver Analysis

d. Medium Analysis

e. Communication Analysis

Category-IV: Social Responsibility

a. Acting Responsibly

b. Demonstrating Ethical Behavior in

- Personal life

- Workplace

- Community

Category- V: Human Relation Skills

a. Decency

b. Decorum

c. Discipline

d. Empathy

e. Sharing

f. Fellow-Feeling

g. Politeness

h. Peace and Harmony

i. Healthy Competition

Category VI: Emotional Skills

a. Self Awareness

b. Self Management

c. Social Sensitivity

d. Social Management

Category VII: Adjustment Skills

a. Skill of Home Adjustment

b. Skill of School Adjustment

c. Skill of Social Adjustment

d. Skill of Emotional Adjustment

e. Skill of Health Adjustment

f. Skill of Symbiosis

Category- VIII: Human Development Climate

a. Trust

b. Risk Taking

c. Openness

d. Reward

e. Responsibility

f. Support

g. Feedback

h. Team Spirit

i. Collaboration

Category IX: Citizenship Skills

a. Sovereign

b. Social Sensitivity

c. Learning about Community

d. Secularity

e. Democratic

f. Public and Republic

g. Leadership

h. Management

i. Cooperation and Collaboration

j. Participation Skill

Category- X: Accountability and Adaptability

a. Exercising personal responsibility in personal, workplace and community contexts;

b. Setting and meeting high standards.

3. **LIFE SKILLS Category-XI: Life Skills**

a. Self Awareness

b. Empathy

c. Interpersonal Relationship

d. Effective Communication

e. Critical Thinking

f. Creative Thinking

g. Decision Making

h. Problem Solving

i. Coping up with emotions

j. Coping up with Stress

4. **Critical Thinking and Training Thinking Category-XII: Critical Thinking Skill**

a. Analyzing

b. Reflecting

c. Querying Evidence

d. Conjecturing Alternatives

e. Drawing Conclusion

f. Stating Results

g. Justifying Procedures

h. Presenting Arguments

i. Self Regulation

Category XIII: Training Thinking

a. Depressive to Booming

b. Non-Pathological to Pathological

c. Invalid to Valid

d. Polar to Null

e. Ego-centric to Socio-centric

f. Obsessive to Final

g. Partistic to Wholistic

h. Non-sensible to Sensible

i. Traditional to Modern

j. Pessimistic to Optimistic

k. Crooked to Straight

l. Rigid to Flexible

m. Unsocial to Social

n. Dependent to Autonomous

o. Narrow to Broad

p. Practical and Theoretical

q. Non-Technical to Technical

r. Non-Logical to Logical

s. Non-Imaginative to Imaginative

5. **RESEARCH SKILLS Category-XIV: Research Skills**

a. Skill of identifying problem

b. Skill of formulating Problem

- Developing Conceptual Framework

- Skill of Reviewing and implication

- Skill of Research Questioning

- Developing Rationale

- Constructing Statement

- Enunciating Objectives

- Formulating Hypotheses

- Operationlization/Explanation of Terms

- Deciding Research Type

- Research Designing

- Population and Sampling Techniques

- Specifying Delimitation

- Constructing/Selecting Tools and Techniques

- Laying down Data Collection Procedure

- Working out/ Deciding Data Analysis Techniques

- Interpreting Analyzed data

- Formulating Findings

- Discussion Mechanism

- Converging into Theses

c. Building Theory

6. **Constructivist and Connectionist Skills Category-XV: Constructivist Skills**

a. Engagement

b. Germination

c. Incubation

d. Innovation

e. Creation

Category-XVI: Connectionist Skills

a. Interpretation of units

b. Activation of the network of units

c. Learning Algorithm

d. Recurrent Neural Networking

e. Evolving continuous, dynamic systems approaches

7. *Systems Thinking*

Category-XVII: Systems Thinking

a. Cognizing all the parameters
b. Establishing interrelation and interdependence
c. Realizing Integrated Whole
d. Ensuring Efficiency
e. Ensuring Cost Effectiveness

8. *Information Age Skills Category-XVIII: Info-Savvy Skills*

- Asking
- Accessing
- Analyzing
- Applying
- Assessing

Category-XIX: Techno-Pedagogic Skills:

- Media-Message Compatibility
- Media Designing
- Integration of message, media and modes
- Proximity of Message Forms
- Media Language Proficiency
- Media Choice
- Media Credibility and Message Authenticity

Category-XX: Digital Skills

- Functional Literacy skills: Use of images, graphics, videos, charts and visual literacy.
- Scientific Literacy skills: Understanding of both theoretical and applied aspects of science and mathematics.
- Technological Literacy skills: Competence in the use of information and communication technologies.
- Information Literacy skills: Ability to find, evaluate and make appropriate use of information, including via the use of ICTs.
- Literacy skills : Appreciation of diversity of cultures.
- Awareness skills : Understanding of how nations, corporations and communities all over the world are interrelated.

Category – XXI : Open Education Resourcing

- Open Education Resources for Learners
I. Learning- Content (geogebra, google earth)
II. Creativity (hot potato, C map)
III. Evaluation (R-campus and Mahara)
- Open Education Resources for Teachers, Teacher Educators and Facilitating Learning
I. Learning Management System (Moodle and Wiki spaces)
II. Teacher Managed Communication Platforms (Classroom 2.0 and Web Quest)
III. Statistical Tools for data processing
V. e-books
VI. e-News Letters
VII. Webinars and Web Conferencing
VIII. WBI

9. *Leadership, Administration and Management Skills Category XXII: Creative Leadership Skills*

a. Socio-centric rather than ego-driven
b. Empowers the people to make decisions rather than take decisions
c. Listen oriented than tell oriented
d. Pulls the organization towards a vision
e. Listens to intuition
f. Generates lasting commitment
g. Open-minded than opinionated
h. Teaches the importance of self-responsibility rather than teaches subordinates to take directions
i. Models self-responsibility rather than in a self-protect mode
j. Knows, relaxing control yields results rather than is afraid of losing control
k. Focuses on building on strengths rather than finding and fixing problems.
l. Teaches how to learn from mistakes rather than quick to fire those that fail

Category: XXIII: Administration Skills

a. Planning
b. Organizing
c. Staffing

d. Coordinating

e. Budgeting

Category XXIV: Time Management

a. The ability to Say " No", Learning to Say "No", How to Say "No"

b. Spacing Things Out; do not procrastinate

c. Using Social Time Wisely

d. Prioritizing and Re-prioritizing constantly

e. Keeping your health/sleep/exercise in check

Category- XXV: Key Skills for Every Manager

a. Leadership and People Management

Attract, retain, motivate, coach and develop team members for high performance.

b. Communication Skills

Communicate, present, assert, speak senior management language

c. Collaboration Skills

Influence, build relationships, manage conflicts

d. Business Management Skills

Understand strategy, business functions, decision-making and workflow

e. Finance Skills

Budget, forecast, manage cash flow, understand financial statements, manage business metrics

g. Project Management Skills

Plan and manage successful projects, manage risks, costs, time and project teams

10. Spiritual Development Skills

Category XXVI: Spiritual Development

a. Religiosity

b. Knowledge of Soul

c. Quest for life values

d. Conviction, Commitment and Character

e. Happiness and Distress

f. Brotherhood

g. Equality

h. Acceptance and Empathy

i. Love and Compassion

j. Flexibility

k. Leadership in Educational Change

11. YOGA Skills

Category XXVII: Yoga Skills

a. Yama or Eternal Vows: Ahimsa, Satya, Astey, Aprigraha and Brahmacharya

b. Niyama or Observances: Saucha, Santosha, Tapas, Savdhyaya, Ishvarapranidhana

c. Asana: Firm, Comfortable Meditative Posture

d. Pranayama: Regulation of the Vital Force

e. Pratyahara

f. Dharna

g. Dhyana

h. Samadhi

12. Wholistic Development Skills Category XXVIII: Wholistic Education Skills

a. Subject Knowledge

b. Inter-disciplinary

c. Environmental Attitude

d. Health Development

e. Emotional Development

f. Spiritual Development

g. Integrated Development

13. Inclusive Education Skills

Category XXIX: Inclusive Education Skills

Various sets of Skills are required for realizing inclusive Education including all the children, such as:-

a. Attention Deficit Hyperactive

b. Compulsive Obsessive Neurotic

c. Visually Challenged

d. Hearing Impaired

e. Mentally Retarded

f. Deaf, Dumb and Autistic

g. Beta Thal Major and Sickle Celled

h. Gifted

i. General

14. Universal Becoming Skills

Category XXX: Universal Becoming Skills

a. Relating Self with all the entities

b. Treating Nature as a Source

c. Realizing Resonance amongst all Entities

d. Realizing Universal Development Index (UDI)

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Developing Entrepreneurship among Disadvantaged Society in Independent India

Simran Sodhi* and Amit K Dwivedi**

Today, when we talk of entrepreneurship in India, we do not limit our deliberation to this particular word. In India, entrepreneurship is an umbrella term that covers various entrepreneurial segments. Here we are articulating rural entrepreneurship, women entrepreneurship, differently-abled entrepreneurship, and many others. However, this is one of the many clusters described as "Disadvantaged Entrepreneurship". At this point, India is moving towards an ecosystem suitable for entrepreneurship, and what makes it more phenomenal is the inclusive growth of all segments of the country. Amongst these, disadvantaged segmentation of entrepreneurship has played a significant role in uplifting those corners in the dark for quite a long time. Every other economy on the globe is supportive of their entrepreneurial ventures. Nevertheless, very few are targeting all segments to become entrepreneurial or better; we can say *"Atmanirbhar"*.

However, the canvas we can see today is the outcome of seventy-four years. From 1947 to 2021, India has worked steadily towards a self-reliant nation. Today, when India is approaching seventy-five years of independence, we can say that we have made our foundational leaders proud. The seeds of entrepreneurship they had sown some seven decades ago have turned into a blossomed tree. The fruitful results have brought us *Amrit Mahotsav* of India's seventy-fifth Independence year. This article will take us on the historical journey of India from when we took our first step towards Entrepreneurial Bharat.

It all started in 1947…

After India got Independence, it was shattered into many small dormitories. Our leaders have put extraordinary efforts to make it a unified nation. After binding it as one country, it was necessary to

* Research Scholar, Entrepreneurship Development Institute of India, P.O. Bhat, 382428, Ahmedabad- 382428 (Gujarat). E-mail:simran07@ediindia.org
** Associate Professor and In-charge, Department of Policy Advocacy, Knowledge and Research, EntrepreneurshipDevelopmentInstituteofIndia,P.O. Bhat,382428,Ahmedabad- 382428 (Gujarat). E-mail: akdwivedi@ediindia.org

give it a direction. Just after Independence, India's economic situation was not favourable. That time was required to motivate the countrymen to stand up and work every bit to craft it into a leading economy. On one hand, leaders were making it one nation, and on the other hand, our leaders were framing plans to make it a progressive economy. In 1951, the government came up with the first Five Year Plan. The objective of this plan was to double the country's real national income and double the per capita income within the next twenty years. To attain these objectives government had to focus on building the elementary infrastructure. The next major call of that time was employability. The government had to focus on providing employability to the people that could fulfil their basic needs. The government was well aware that flourishing countrymen is the key to a developing economy. At that time, the country was mostly agrarian. The majority of the population was involved in cultivation. This created the problem of under-employment and seasonal employment.

Industrialization: A Stepping Stone for Entrepreneurship

The problem of unemployment and under-employment required urgent attention. According to data, seventy per cent of the total working force was absorbed by the agricultural sector. The government of India (GOI) looked at industries to solve unemployment. They decided to focus on setting up huge industries that would employ the labour. That was why the second five-year plan was pointing more towards rapid industrialization, expansion of employment, and reduction in economic inequalities.

After independence, the status of the industry in India was alarming. The country was technologically backward, and production was deficient. The biggest hurdle in developing the industry was a lack of capital. India was not in a position to invest very heavily in this development. On the other hand, some private industrialists were not ready to take a such big risk of investing in a new industry. Eventually, GOI also realised the importance of small-scale industries. These industries were more labour intensive and

required semi-skilled or unskilled labour. But the production in small-scale industries was costlier than factory production. Considering all points, the government has to offer schemes that would support the industries and labour. The government by the second five-year plan wanted to place greater emphasis on organised industry. This was a stepping stone towards Entrepreneurial India.

Becoming More Entrepreneurial

By the passing years, it was observed that low productivity has another angle which is inadequate education. The rise of elementary education and technical and professional education was significant. Though, it could not be stepped up suddenly. The government came up with an Industrial policy and by the third five-year plan, the government's objective changed a bit. Now, the GOI focused on self-sustaining India independent of outside aid. Parallel to that, the employment-oriented thinking pattern changed. After 1961, we can observe a change where policymakers realised the essence of incentives and facilities for entrepreneurs. Earlier, the government-supported industry because it provided employment, but now the thought process took a curve. Now the policies were framed to encourage entrepreneurship in the country. Policymakers paid attention to enterprises and parallel to that they paid equal attention to human development for entrepreneurship development. We can observe a rise in the country's elementary, professional, and technical education. The rise in the annual enrolment in such courses was the main indicator. In 1962, GOI started Small Industry Expansion and Training Institute (SIET) Hyderabad. The objective of SIET was to promote, develop and modernize small and medium entrepreneurs (SMEs). The third five-year plan has brought major changes in the planning of the Indian government. This time witnesses the kick start of entrepreneurial development in India.

Slowly and gradually, the government came up with different things to encourage entrepreneurship and in later years, it has put efforts into making entrepreneurs through entrepreneurial education. The establishment of the Industrial Development Bank of India (IDBI) in 1964 added to facilitating entrepreneurs. The government was now very much focused on small and medium enterprises. There were special goods and products reserved by the government to be produced by small-scale industries.

GOI provided the basic necessities and financial aid to support SMEs. At this time, the industry was not supported to generate employment. There was a major shift in this mindset. This era spoke of a self-sustaining nation, which was possible only with the help of entrepreneurial development at every level, be it large, medium or small. SMEs were great support towards rural development.

In 1972, IDBI came up with Technical Consultancy Organisation (TCOs). The function of TCOs was to conduct surveys on industrial potential, prepare project profiles, techno-economic appraisal, market research, technical and managerial assistance to entrepreneurs. Along with this they also assisted entrepreneurs with modernization and technological up-gradation. Seeing the positive results of these initiatives, the government inaugurated the first centre - Centre for Entrepreneurship Development in Ahmedabad. The initiative proved to be a big hit. In result SIET, SIDO, IDBI and TCO started Entrepreneurship Development Programmes. In following years, the states of India along with the support of national financial institutions established CEOs at state level. The government put efforts in spreading entrepreneurship in every community of India and did not restrict it among few communities which were the case few decades ago. By 1977, the government emphasised on the role of small-scale, tiny and cottage industries. In 1980, again few changed were made in industrial policy. The focus shifted towards promotion of competition in the domestic market, technological up-gradation and modernization.

A significant step was taken in the year 1983 when IDBI, IFCI, ICICI and SBI established a National Resource Organisation, "Entrepreneurship Development Institute of India". In coming years "National Institute for Entrepreneurship and Small Business Development" was also established. These two has contributed heavily in generating and increasing the First Generation Entrepreneurs in India. By the years, many institutes were set up and they have contributed heavily in Entrepreneurship Development Trainings. National Institute for Micro, Small and Medium Enterprises, EDII, National Institutes for Entrepreneurship and Small Business Development, Indian Institute for Entrepreneurship, National Science and Technology Entrepreneurship Development Board, Rural Development and Self Employment Training Institute are some of the most significant names that have contributed in the Entrepreneurship Development in India.

The most significant impact on Entrepreneurship in India can be observed after 1991 reforms. The new economic policy of India in 1991, the LPG Model of Growth, opened doors for global exposure. This policy has brought major changes in the economy like; increase in the investment limit for the small-scale industries, freedom to import capital goods, freedom for expansion and production to industries, abolition of restrictive trade practices, removal of industrial licencing and registration, minimising public sector, reduction in tariffs, and long term trade policy. GOI also came up with "Policy measures for Promoting and Strengthening Small, Tiny and Village Entrepreneurship". After these changes in 1991, people who were bit reluctant to take risk in entrepreneurship felt more encouraged towards entrepreneurship. People which did not belong to entrepreneurial communities of that time started thinking of entrepreneurship. Changes like freedom to import, production expansion, privatisation, long term policy encouraged people to take entrepreneurial risks. People felt more secured and got encouraged to start something of their own. On the other hand EDPs and institutions like EDII helped Indian to gain entrepreneurial skills and knowledge. The blend of policy support and knowledge has done wonders in creating entrepreneurial mind-sets.

A Protracted Journey

India got a new direction after the economic reforms of 1991. Giving new statements to the industrial policy, the trend now shifted to encourage the entrepreneurship, development of indigenous technology through investment in research and development, bringing new technology, and dismantling market regulatory system. This reform has opened wide streams for entrepreneurial development in the country. People who were not confident enough were ready to take risks and establish themselves as entrepreneurs. After this, the government came up with many support schemes, initiatives, aids and facilities to promote entrepreneurship. With every passing year, government offered something new to the entrepreneurs according to the requirement of dynamic market. Efforts were made to make the ecosystem of India entrepreneurial-friendly. In 1999, a separate ministry was established, "Ministry of Small Scale Industries & Agro and Rural Industries" to support the SMEs along with a comprehensive Policy Package for the Small Scale and Tiny Sector in August 2000.

2001 brought new support for entrepreneurs in India through Incubation Centres. Another major contribution by the government was "The Micro, Small and Medium Entrepreneurship Development Act 2006". For the first time in 2006, a legal definition for Micro, Small and Medium Enterprises (MSME) was given. Another great contribution to Entrepreneurial India was the establishment of a separate ministry on 9 November 2014, "Ministry of Skill Development and Entrepreneurship" (MSDE). The ministry was responsible for coordinating skill development efforts across India, building vocational and technical training framework, skill up-gradation, building new skills and innovative thinking, and taking care of balance between demand and supply of skilled manpower. MSDE took initiatives through its functional arms – Directorate General of Training (DGT), National Skill Development Agency (NSDA), National Council for Vocational Education and Training (NCVET), National Skill Development Corporation (NSDC), National Skill Development Fund, 38 Sector Skill Councils (SSCs), 33 National Skill Training Institutes (NSTIs/NSTI(w)), 15000 Institutional Training Institutes (ITIs) under DGT, and 187 training partners registered with NSDC. The ministry further collaborated with existing networks of Skill Development Centres, universities Central Ministries, State Governments, international organisations, industries, and NGOs to implement Skill Development efforts in India.

In the Union Budget of 2015-16, the Finance Minister of India announced the formation of Micro Units Development & Refinance Agency Ltd. (MUDRA). The objective of MUDRA was to develop micro-enterprise sector by providing various supports that would include financial support in form of refinancing. It was decided that MUDRA would partner with Banks, MFIs and other lending institutions at the state as well as regional level to provide micro finance to micro entrepreneurs in India. The micro finance would further include responsibilities like; income generation opportunities for the people at the bottom of the pyramid and providing services for credit provisions, financial literacy and other social support. The government of India has taken endless efforts to build a better entrepreneurial ecosystem with every passing year. In 2016, GOI introduced #Start-up India. The initiative rolled out many programmes to support entrepreneurs, build a robust start-up ecosystem, and

transform India into a country of job creators instead of job seekers. The key pillars of this initiative were; simplifying the process for entrepreneurs, providing financial support, and creating numerous incubators and innovation labs. The government upgraded the plans annually under this initiative as per the need of entrepreneurs. Right after that Stand-up India was launched which was completely focused on entrepreneurship development among a disadvantaged sections of India.

Catering particular Sections: An Inclusive growth of the Disadvantaged through Entrepreneurship in India

After a few years of Independence, India was directed towards development with the help of industrialization and entrepreneurship. This has really helped the country to grow. However, with the passing years, it was realised that a few sections in the Indian society need special attention that would bring them to an equal level with others in the country. For the same, GOI took initiatives at different points of time. Termed as "Disadvantaged Section" as a whole, it consists of different sub-groups of Women, Schedule Caste, Schedule Tribe, and Dalit.

In 2005, a "Dalit Indian Chamber of Commerce and Industry was established. The chamber's vision was to instill the spirit of entrepreneurship among Dalit youth so that they can develop business leadership and empower themselves. The chamber supported the Dalit people by providing skills through seminars and workshops, interaction with industry and government, and sharing relevant and latest information about emerging opportunities. In parallel, GOI came up with different initiatives for women entrepreneurs. Shree Shakti loan for women entrepreneurs, Annapurna Scheme, Mudra Yojana Scheme, Dena Shakti Scheme, Bharatiya Mahila Bank, and The Women Entrepreneurship Platform are some of the crucial steps taken by government to empower women entrepreneurs. Similarly, policy makers supported Tribal communities and Schedule Castes in India. Recently, in the year 2020, Ministry of Tribal Affairs and Associated Chambers of Commerce and Industry of India (ASSOCHAM) have embarked upon an initiative, "Tribal Entrepreneurship Development Programme" for Dalit people. In a same manner, "Venture Capital Fund" was started as an initiative for Schedule Caste

people in India. A recent initiative of "Stand-up India was completely focused on the disadvantaged section of India.

One of the many reasons for segmenting these groups is to understand their needs and cater them. Every sub-group face a different kind of challenge when they are in the process of establishing their entrepreneur. Considering that, the policymakers tried to understand the requirements of every sub-group and accordingly offered the government support to give a boost in their process of entrepreneurship. To take things to the next level, the government is now started thinking about grassroots entrepreneurship. This would help in uplifting particular communities. Already steps have been taken to initiate this type of development through National Innovation Foundation (NIF). With the assistance of the Department of Science and Technology, GOI initiated NIF to strengthen grassroots technological innovation and traditional knowledge. This initiative is a foundational stone toward grassroots entrepreneurship. Another emerging segment is the "Differently-Abled Entrepreneurs". The attention has already shifted towards this segment and the government has already started a few initiatives to understand the requirements of differently-abled people so that policymakers could cater for their needs in a required manner.

Amrit Mohatsav of Third Largest Start-up Ecosystem: The Conclusion

From the time of Independence till the seventy-fifth Independence year of the country, we see an exorbitant change in India. Starting from scratch, there was a time when it all seems like a dream. But today, India stands as the third largest start-up ecosystem. States Start-up Ranking and Business Reform Action Plans are the proceedings which started a few years ago to create a holistic and better ecosystem in every state of the country. All these actions help in increasing the Ease of Doing for Entrepreneurs. However, reaching this point took a lot of time and effort. The vision of the Government of India is highly appreciable, especially the leaders at the time of Independence, who could foresee the essence of things like Industrialisation and Entrepreneurship for the development of the country. The major significance lies in the fact that policymakers have moved with the dynamism of the environment and walked parallel with more

sophisticated and improved schemes and initiatives. The timely decisions like the Economic Reforms of 1991 played a crucial role in keeping the development process steady. India is working unceasingly towards a better economy and a more developed ecosystem. Today's Bharat has a new vision, with higher goals that would lead this country towards the largest economy in the world.

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Impact of University Education Commission on Indian Education

Krishna Kant Sharma*

After Independence, the Central Advisory Board of Education (CABE) and the Inter-University Board (IUB) advised the Indian Government to appoint a University Education Commission to suggest reforms in University Education. The Government of India on the advice of CABE and IUB appointed the University Education Commission under the chairmanship of Dr. Sarvapalli Radhakrishnan, on Nov. 14, 1948. The other members of this Commission were Dr. A. Laxmanswami Mudaliar, Dr. Tara Chand, Sir James A. Duff, Dr. Zakir Hussain, Dr. Arthur Morgan, Dr. Meghnad Saha, Dr. Karm Narayan Behl, Dr. John J. Tigert, Shri Nirmal Kumar Siddhanta. This Commission is also known as Radhakrishnan Commission. It was the first education commission of Independent India. The objective for the appointment of this Commission was – 'to report on Indian Universities and suggest improvement and extension that may be desirable to suit the present and future requirements of the country.' The Commission prepared a questionnaire related to the condition of the contemporary Indian universities, their problems and remedies and mailed it to approximately 1000 respondents related to higher education of these. On the basis of 600 responses in the form of filled-in questionnaires, the Commission prepared a statistical description. The second step was to study the Indian universities directly, to meet the Vice Chancellors, teachers and students of the universities to understand their problems, listen to their demands and know their ideas for reform. The Commission prepared a complete account of this study. Thereafter, on the basis of both these studies, the Commission discussed and prepared an extensive report and presented it to the Government of India on Aug. 25, 1949. This report is a comprehensive document of 747 pages comprising 15 chapters.

The commission suggested that the universities should play a significant role in the

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* Former Dean, Faculty of Education, University of Kota, Kota and Principal, Bhagwati Shikshak Prashikshan Mahavidyalaya, Gangapur City, Distt. Sawai Madhopur, Rajasthan 322201. E.mail:2010kkant@gmail.com

changed scenario of India. The aims and functions of higher education defined by the Commission are as follows:

1. To produce such persons who are physically healthy and mentally intellectual.

2. To find out the hereditary qualities of the people and develop them through training.

3. To produce such persons who may provide leadership in the field of politics, administration, business, industry and commerce.

4. To produce such persons who are farsighted, intelligent and mentally superior and may contribute to social reform.

5. To produce such wise persons who may disseminate education to make democracy a success, make an incessant search for new knowledge, manage the business and may makeup the material deficiency of the country.

6. To produce such youths who may preserve the cultural heritage of the country and may further contribute to it.

7. To develop the character of the students.

8. To develop, preserve and refine the democratic values–equality, freedom, fraternity, and justice among the students.

9. To develop the feeling of national discipline among the students.

10. To develop world fraternity and internationalism among the students.

11. Spiritual development of the students.

Evaluation of the Recommendations

The Government implemented some of its suggestions in a time-bound manner and got good results too. But in the context of the present scenario, some of its suggestions are absurd. The following recommendations of the University Education Commission are of much importance and significance.

University Education in the Concurrent List

The Commission suggested placing university education on the Concurrent List and to make its organisation a joint responsibility of the Central as well as the Provincial Governments. Higher education in any country is regarded as education of national importance, therefore the Central Government should have a significant role in its organisation. The Government accepted this proposal of the Radhakrishnan Commission as late as in 1976. Had this proposal been accepted by the Government earlier the condition of higher education would have been much better.

Formation of the University Grants Commission

To maintain the standard of university education and to provide necessary grants to the universities, the commission recommended forming the University Grants Commission. In 1953 the Government converted the University Grant Committee into University Grants Commission and through an amendment, in 1956, it was given autonomous status. This organisation has succeeded greatly in the upliftment of higher education. Now as per the recommendation of National Education Policy 2020 in place of UGC Higher Education Grants Council (**HEGC**) will function under the umbrella of the Higher Education Council of India (**HECI**). Definitely, the future will tell about its significance. Right now one can only hope for better results.

Control over the Universities and Affiliated Colleges

This commission fixed the minimum working days of the universities and their affiliated colleges to be 180 days excluding the examination days and also fixed the minimum age (18 years) and qualification (intermediate passed) for admission to the universities and colleges. It also suggested giving admission to able students only. Further, it fixed the maximum strength of students in a university to be 3000 and in a college to be 1500. This suggestion is of great significance because it is the increasing number of students which is the root cause of all the problems in higher education. Now, the National Education Policy–2020 said that in the future large multidisciplinary universities and colleges will facilitate the move towards high-quality holistic and multidisciplinary education. After almost 75 years this is the need of the hour.

Three-year Degree Courses and Compulsory General Education

The suggestion to make a 3-year degree curriculum was first given by the Indian University Commission, but to make general education compulsory at this level in any stream of arts, science and vocational subjects, was first given by this Commission. Its implementation would have benefitted in two ways - first, the preparation of scholars with varied knowledge in the society and second correlation between different subjects would have been established. But instead, most of the universities implemented it in their own ways; some made the education of language compulsory while others made something else compulsory. National Education Policy 2020 also said that in the future undergraduate degree will be of either 3 or 4-year duration with multiple entry and exit options.

Reform in the Teaching Standard

To improve the condition of the universities and their affiliated colleges this commission suggested – the appointment of able teachers, admission of able students, increase in the working days of the universities and colleges, implementation of a tutorial system and organisation of seminars. It is obvious that all these could definitely improve the teaching standards.

Reform in the Pay Scales and Service Conditions of Teachers

The commission suggested increasing the pay scales and to improve the service conditions of the teachers to attract able persons to this profession.

Preference for Ability and Research Work in Promotion

Till then, seniority was the basis for the promotion of teachers in the universities. This Commission suggested considering ability and research work besides seniority as the basis for promotion. It was a good step but it was strictly implemented a few years back only.

Welfare Programmes for Students

This commission gave varied suggestions to organize various student welfare programmes

like the formation of a Student Welfare Board, the appointment of the Director of Physical Education for the proper organisation of physical education, games and sports: appointment of the Dean of Student Welfare to solve students problems, arrangement of subsidized mid-day meals and provision of hostels for students. All these helped secure students' welfare. Now after almost 75 years of taking a step ahead NEP 2020 said that financial assistance to students shall be made available through various measures. Efforts will be made to incentivize the merit of students belonging to SC, ST, OBC, and other SEDGs.

Proper Direction to Different Vocational and Technical Education

The Technical education like agriculture, commerce, engineering, medical, law, teachers training etc. However, the most significant suggestion of this commission was to encourage research work in all fields. National Policy on Education 2020 moves one step ahead in this direction and said that Higher Education Institutions will focus on research and innovation by setting up start-up incubation centers; technology development centres; centres in frontier areas of research; greater industry-academic linkages; and interdisciplinary research including humanities and social sciences research.

Creative Suggestions to Reform University Examinations

This commission had suggested reforming the university essay type examinations as early as1949, and to introduce objective type examinations. Had we tried honestly in this direction, the university examinations could have long been made useful, valid and reliable.

Widespread Aims of Higher Education

This commission emphasized the physical, mental, social, cultural, moral, political, economic and spiritual development of students through higher education. In reality, however, these are the aims of general, compulsory and free education in any society. The efforts to achieve them should begin right from the beginning. The aims of higher education should be limited and specific. In other words, the main aim of higher education should be to produce specialized manpower to perform specialized tasks.

Compulsory Religious Education

As far as religious and moral education is concerned it should be included in the education of any country, but cautiously. There is no rationale for organizing religious education at the graduation level. The 3-year curriculum prepared by the Commission for this level was still more ludicrous. It seems as if the Commission wanted to impart only religious education at the graduation level.

No Clearcut Suggestion for the Medium of Education

On the one hand, the commission accepted that the medium of higher education in India should be the regional languages and on the other hand, it suggested the use of English till the regional languages develop to that extent. Its third suggestion is still more trivial that is there should be the facility of education, in any field, through the medium of the national language Hindi. The use of the Devanagari script for every federal language and to bring about necessary reforms in the Devanagari script seems still more confusing.

Discriminatory Pay Scales for Teachers

The suggestion of five categories of teachers (Research fellow, Instructor, Lecturer, Reader and Professor), in the universities and only one category of teachers (lecturer) in the affiliated colleges, itself was illogical. Secondly, the fixation on the low pay scale for college lecturers in comparison to the university lecturers was absurd and completely against the theory-same pay for the same work.

Impracticable Suggestions of Rural Universities

It is an indisputable fact that India is an agrarian country and the development of the villages is a prerequisite for the development of the country. But to establish Rural universities and small affiliated colleges (with a strength of 300 students only) seems illogical. Secondly, it was impossible for the Government to implement this plan. It was an impractical suggestion, as a result, no progress could be seen in this direction.

Narrow Attitude Towards Women's Education

The commission emphasized making women good mothers and good housewives through education. It was completely a myopic attitude

of the commission toward women's education, particularly in the present age of democracy when there should not be any discrimination in the nature of the education of men and women.

Impact of the Commission

The Central Advisory Board of Education considered the suggestions of this commission in April 1950 and accepted most of its recommendations. But one of its fundamental recommendations i.e. to enlist education in the Concurrent List was not accepted. It was only in 1976 through the 42nd Constitutional Amendment that education was placed in the Concurrent List. But some of its recommendations were immediately acted upon and they are-

(1) In 1953 the University Grants Committee was converted into University Grant Commission and in 1956 through an amendment, it was accorded independent status. Since then, UGC is playing a crucial role in organizing higher education, maintaining its standard, coordinating higher education and encouraging research work.

(2) In 1954 the Government established a Rural Higher Education Committee at the centre and gave it the responsibility to organize rural education.

(3) On the recommendation of this Commission the establishment of the universities, according to the regional needs, gained momentum throughout the country.

(4) It was on the recommendation of this Commission that independent colleges were established for agriculture, commerce, engineering, medical, law and teacher training.

(5) In some universities 3 years degree course was introduced, at present, however, every university has implemented it.

(6) Higher education in some subjects began to be imparted in regional languages. Simultaneously, the work on the dictionary of terminologies also gained momentum.

(7) National Cadet Corps (NCC) was promoted in the universities and colleges.

(8) The pay scales of university and college teachers were raised and their service conditions were improved.

(9) Many new plans and programmes for the student's welfare began, for instance, the establishment of the Student Welfare Advisory Board in the universities, the appointment of Dean, Student Welfare; and Director, Physical Education, organization of subsidized mid-day meal, the establishment of restaurants and construction of hostels.

Conclusion

In retrospect one may say that many concrete proposals for reform in higher education were suggested by Radhakrishnan Commission. In the words of Dr Rajendra Prasad, The Commission after serious deliberation has presented a very valuable document on the achievement of education in our universities, and it has provided useful suggestions for the attainment of varied specialised skills. However, some of the suggestions of the Commission were also trivial as the establishment of Rural Universities and their affiliated colleges, throughout the country. It is quite appreciative that our Government accepted most of the recommendations of this commission, implemented them and brought reform to higher education. But the implementation work moved at a snail's pace. Had it been implemented immediately the nature and the form of higher education would have been definitely different and better.

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Youth: The Growth Engines of the Country

Narendra Damodardas Modi, Hon'ble Prime Minister of India delivered the Convocation Address at the 42nd Convocation Ceremony of the Anna University, Chennai on July 29, 2022. He said, "The next 25 years are crucial for both you and India. It is the Amrit Kaal leading up to the 100th year of independence. We are lucky that many young people like you will build their own future as well as India's. So, your growth is India's growth. Your learnings are India's learnings. Your victory is India's victory. So, when you make your plans for yourself and your family… Remember that you are automatically making plans for India too. It is a historic opportunity that only your generation has. Take it and make the best out of it!" Excerpts

First of all, congratulations to all those who are graduating today in Anna University's 42nd convocation. You would have already built a future for yourselves in your minds. Therefore, today is not only a day of achievements but also aspirations. I wish that all the dreams of our youth come true. This is also a special time for teaching staff and non-teaching support staff at Anna University. You are nation-builders who are creating the leaders of tomorrow. You would have seen many batches come and go but each batch is unique. They leave their own set of memories. I specifically wish the parents of those who are graduating today. Your sacrifices have been crucial to your child's achievement.

Today, we are here to celebrate the achievements of our youth in the vibrant city of Chennai. In February 1897, 125 years ago, Swami Vivekananda spoke to the Madras Times. He was asked about his plan for the future of India. He said: "My faith is in the younger generation, the modern generation, out of them will come my workers. They will work out the whole problem, like lions." Those words are still relevant. But this time, it is not only India that is looking toward its youth. The whole world is looking at India's youth with hope. Because you are the growth engine of the country, and India is the world's growth engine. It is a great honour. It is also a great responsibility, which I am sure you will excel in.

When speaking of faith in our youth, how can we forget Bharat Ratna, former President Dr APJ Abdul Kalam. I am sure that it is a matter of pride for everyone in Anna University that Dr Kalam was closely associated with this university. I have heard that the room he stayed in has been converted into a memorial. May his thoughts and values inspire our youth.

You are graduating at a unique time. Some would call it a time of global uncertainty. But I would call it a time of great opportunity. The COVID-19 pandemic was an unprecedented event. It was a once-in-a-century crisis that nobody had any user manual for. It tested every country. As you know, adversities reveal what we are made of. India faced the unknown confidently, thanks to its scientists, healthcare workers, professionals and common people. As a result, today, every sector in India is bursting with new life. Whether it is industry, innovation, investments or international trade, India is at the forefront. Our industry has risen to the occasion. For example, electronics manufacturing. In the last year, India was the world's second-largest mobile phone manufacturer. Innovation is becoming a way of life. In just the last 6 years, the number of recognised start-ups increased by fifteen thousand percent! Yes, you heard that right – fifteen thousand percent. From just 470 in 2016, it is nearly seventy-three thousand now! When industry and innovation do well, investments follow. Last year, India received a record FDI of over 83 billion dollars. Our start-ups too received record funding post-pandemic. Above all this, India's position in the international trade dynamics is at its best ever. Our country recorded the highest-ever exports of goods and services. We exported food grain at a crucial time for the world. We recently signed a trade deal with U. A. E. to our West and with Australia to our East. India is becoming a vital link in global supply chains. We have the chance to make the greatest impact now, as India is converting obstacles into opportunities.

Most of you have studied in streams related to engineering or technology. In this era of tech-led disruptions, there are three important factors in your favour. The first factor is there is a taste for technology. There is a growing sense of comfort with

the use of technology. Even the poorest of the poor are adapting to it. Farmers use apps to get information about markets, weather and prices. Homemakers are using technology to make their lives easier. Children are learning using technology. Small vendors are using digital payments. If you give them cash, some of them will actually tell you they prefer digital. India is the world leader in digital payments and fintech. A huge market for technological innovations is waiting for you to do your magic.

The second factor is there is trust in risk-takers. Earlier, on social occasions, it was difficult for a youngster to say he or she was an entrepreneur. People used to tell them to 'get settled', meaning, get a salaried job. Now, the situation is the opposite. People ask whether you have tried to start something on your own! Even if one is working in a job, it is seen as cooler to work for start-ups. The rise of risk-takers means two things for you. You can take risks on your own. Or you can build upon the opportunities created by others.

The third factor is there is temperament for reform. Earlier, there was a notion that a strong government means it should control everything and everyone. But we have changed this. A strong government does not control everything or everyone. It controls the system's impulse to interfere. A strong government is not restrictive but is responsive. A strong government does not move into every domain. It limits itself and makes space for people's talents. A strong government's strength lies in its humility to accept that it cannot know or do everything. This is why you see reforms in every sphere that make greater space for the people and their freedom.

The new National Education Policy ensures greater freedom for youth to take decisions according to evolving situations. The scrapping of nearly 25,000 compliances is boosting ease of living. Removal of angel tax, removal of retrospective tax, and reduction of corporate tax – are encouraging investments and industry. The reforms in drones, space and geospatial sectors are opening up new avenues. The reforms in the infrastructure sector through PM Gati Shakti Master Plan are creating world-class infrastructure at speed and scale. There is a taste for technology, trust in risk-takers and temperament for reform. All these factors are creating a platform for you where opportunities are created, sustained and grown.

The next 25 years are crucial for both you and India. It is the Amrit Kaal leading up to the 100th year of independence. We are lucky that many young people like you will build their own future as well as India's. So, your growth is India's growth. Your learnings are India's learnings. Your victory is India's victory. So, when you make your plans for yourself and your family… Remember that you are automatically making plans for India too. It is a historic opportunity that only your generation has. Take it and make the best out of it! Once again, congratulations and all the best!

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University News Wishes its Readers a

Glorious *Azadi Ka Amrit Mahotsav*

&

150th Birth Anniversary of Sri Aurobindo

CAMPUS NEWS

National Webinar on NEP–2020 and Indian Higher Education

A two-day National Webinar on 'NEP–2020 and Indian Higher Education: A Way Forward' was organized by the Department of Teacher Education, Nagaland University (NU), Kohima Campus, Meriema, Nagaland during July 19–20, 2022. The event was sponsored by ICSSR, NERC, Shillong. The Chief Patron of the event was Vice Chancellor, Prof. Pardeshi Lal, Patron was the Pro-Vice Chancellor, Prof. N Venuh and Co-patron was the Dean, School of Humanities and Education, Nagaland University, Nagaland. The Coordinator of the event was Dr P K Pattnaik, Head, Department of Teacher Education, Nagaland University, Dr Surender Yadav, Assistant Professor, Department of Teacher Education, Nagaland University was the Convener of the event.

The Inaugural Session was moderated and chaired by Dr. T Yolila Sangtam, Assistant Professor, Department of Teacher Education, Nagaland University. Dr. Pradipta Kumar Pattnaik, Head, Department of Teacher Education, NU delivered the welcome address, while Dr. Surendra Yadav, Assistant Professor, Department of Teacher Education, Nagaland University presented the opening remarks of the Webinar. He highlighted the subthemes of the event i.e. Quality of Higher Education: Challenges and Solutions; Equity and Inclusion in Higher Education and Teacher Education; Vocationalisation of Higher Education; and Use of Technology in Teaching, Research, Evaluation and Governance. He further mentioned that the success and failure of NEP-2020 can be determined by its implementation. Therefore, it is important to discuss how far the policy implementation process has been carried out in the last two years.

The Chief Guest, Prof. Bhagirathi Panda, Director, ICSSR, NERC, Shillong, in his speech emphasized the importance and relevance of NEP-2020 at the global level. Globalization of education particularly at the Higher Education level is stressed, in order to bring about changes in values and practices in the knowledge economy. This can be brought about by addressing the challenges such as increasing the Gross Enrolment Ratio, improving the student-teacher ratio, Indigenization of Higher Education, and access to inclusiveness and research. He emphasized that for

successful NEP-2020, there is a need to collaborate between Government, Market, Community and Civil Society.

The Guest of Honour, Prof. N Venuh, Pro-Vice Chancellor, Nagaland University, Kohima Campus, in his address emphasized the need to be realistic and practical while implementing the NEP-2020 policies and goals, taking into consideration the social, cultural, geopolitical, economic challenges and issues. To upgrade quality in Higher Education, he encouraged research studies and utilization of available resources.

The Keynote Address was delivered by Prof. C B Sharma, IGNOU, New Delhi. He highlighted that there is a complete break between School Education and Higher Education. Bridge, this gap is one way forward to improving Higher Education. He emphasized the need for autonomy in the institutions for its improvement in quality.

The Technical Session on 'Quality of Higher Education: Challenges and Solutions' was moderated and chaired by Prof. G N Tiwari, Department of Teacher Education, Nagaland University. In the session, Resource Person, Prof. Ramesh Kothari, Former Vice Chancellor, Veer Narmad South Gujarat University, Surat highlighted the weaknesses of higher education such as limited resources, financial disparities due to privatization of institutions, no single yardstick for quality assessment, etc. One of the major challenges of NEP-2020 is the complete overhaul of teacher education and re-energizing of higher education. He deliberated on the multi-disciplinary education system as proposed by NEP-2020, the role of the National Higher Education Regulatory Council (NHERC), National Research Foundation (NRF), Choice Based Credit System (CBCS), grading system, extension work, need for campus placement cell and open distance learning as important aspects for improvement in quality and quantity in Higher Education. Few solutions were also suggested such as the incorporation of seminar-based classes, 15 weeks of compulsory teaching, research culture, and autonomy of institutions. At the end of the session, ten participants presented their papers under this subtheme. In the concluding remarks, Prof. Ramesh Kothari suggested including and contributing toward vocational education, Choice Based Credit System, and a grading system in the discussions.

The Technical Session on 'Equity and Inclusion in Higher Education and Teacher Education' was moderated and chaired by Dr. M Rajendra Nath Babu, Assistant Professor, Department of Teacher Education, Nagaland University. In the session, Recourse Person, Prof. S K Yadav, Former Head, Department of Teacher Education, NCERT, New Delhi deliberated on the 'Importance of Education as the Only Instrument for the Development of Society'. In order to adopt inclusiveness, several suggestions were recommended such as access to opportunities; equity to all sections of the society; quality in research as well as training quality teachers; affordability to all sections of the society; and curriculum to be inclusive in school education, higher education, and teacher education. He discussed in detail the structure of Teacher Education as per NEP-2020. For Pedagogy, he emphasized hands-on experience, storytelling, art integrated and sport integrated pedagogy. At the end of the session, eleven papers were presented and discussed by the presenter on the subtheme of the session.

The Session on 'Vocationalisation of Higher Education' was moderated and chaired by Dr. Rashmi, Assistant Professor, Department of Teacher Education, Nagaland University. The Resource Person, Kalpana Kaushik, Director (I/c) Indian Adult Education Association, New Delhi expressed her views on Vocationalisation of Education in Higher Education with reference to NEP- 2020. The speaker also highlighted the aims, recommendations, and provisions of NEP-2020 on vocationalisation of education. She also emphasized the worldwide data on vocational education and the role and responsibilities of the Ministry of Education, Ministry of Labor and Employment and Ministry of Skill Development and Entrepreneurship as an agency for implementation of vocational education in the country. At the end of the session, eleven papers were presented and discussed with the presenter on the topic.

The Session on 'Use of Technology in Teaching, Research, Evaluation and Governance' was moderated and chaired by Dr. Surendra Yadav, Assistant Professor, Department of Teacher Education, Nagaland University. Prof. P.K. Mishra, Director, CPRHE, NIEPA, Resource Person for the session emphasized the use of technology in teaching, research, assessment and governance. He stressed the importance of the efficiency of using technology among individuals. At the end of the session, fourteen papers were presented and discussed by the presenter and participants.

The Valedictory session was moderated and chaired by Dr. Pradipta Kumar Pattnaik, and the valedictory address was delivered by Dr. Amarendra Pani, Joint Director and Head (Research Division), AIU, New Delhi. In his valedictory speech, he highlighted the journey of education from the Mudaliar Commission (1952) to the Kothari Commission (1964), NEP (1986), NEP (1986), Acharya Commission (1990), Programme of Action (1992), Yashpal Commission (2005) and National Commission (2006-2007). The speaker also remarked that UNESCO (1972) brought about innovation and transformation in the educational system of India. However, the country felt that these policies are outdated and needed a new policy for the changing need of the time which led to the introduction of the National Educational Policy (NEP, 2020). He emphasized that individuals now need not only the Intelligent Quotient and Emotional Quotient but also the Spiritual Quotient. With the internationalization of education, there is a need for adaptability, adjustability, and employability among the students of higher Education. Asale Vitso & Thronlem Jorlim Konyak, research scholars, Department of Teacher Education, Nagaland University presented a brief report of the entire two days of the national event.

Prof. G N Tiwari, Department of Teacher Education, NU delivered the vote of thanks to all, in his address recognizing the significance of the event, Prof. Tiwari thanked the Coordinator and Convener of the webinar for successfully organizing the event. Gratitude was also extended to the Pro-Vice Chancellor, Nagaland University, Kohima campus, Prof. N Venuh and to all the resource persons, paper presenters, and participants for their active and valuable participation. Also, thanked ICSSR, NERC, Shillong, Meghalaya for giving an opportunity to organize the webinar.

National Multidisciplinary Conference on Possibilities and Dimensions of Skill Development

The One-day National Multidisciplinary Conference on 'Possibilities and Dimensions of Skill Development in Tribal Areas' is being organized by the Department of Economics, Indira Gandhi National Tribal University, Amarkantak, Madhya Pradesh on September 16, 2022. The event aims to be one of the leading events for presenting views on required skills for the tribal people and discussing the inherent tribal skills of tribal people for adding to the

ocean of knowledge and economic development. The event fosters learning among researchers and persons working in skill development areas. The Topics of the event are:

- Role of Microfinance (SHGs) and NGOs in Skill Development of Tribes.
- Agricultural Products of the Tribal Area.
- Knowledge of Tribes Regarding Climate, Medicine, Flora, and Fauna.
- Tribal's Inherent Skills and Indigenous Knowledge.
- Minor Forest Products and their Uses.
- Agricultural Finance for Tribal Farmers.
- Evaluation of Integrated Rural Development Program and Tribes.
- Required Skills among the Tribes in the Globalized World.
- Moringa Leaves and their Medicinal Applications.
- Need for Competency-based Education for Tribal Development.
- Indigenous Health System among the Tribes.

For further details, contact Convener, Prof. Raksha Singh, Department of Economics, Indira Gandhi National Tribal University, Amarkantak-484886 (Madhya Pradesh), Mobile No: 9826231391/ 9377427964/9407655591/9407002449/9409508644, E-mail: *r25006938@gmail.com.* For updates, log on to: *www.igntu.ac.in*

International Conference on Contemporary Multidisciplinary Issues

A two-day International Conference on 'Contemporary Multidisciplinary Issues in Applied Science, Humanities, Agriculture, Animal Health and Production' is being organized by the Rajiv Gandhi South Campus, Barkachha, Mirzapur, Banaras Hindu University during November 14-15, 2022. One of the primary objectives of the event is to provide a platform for creating an environment conducive to the growth of Applied Science, Humanities, Agriculture, Animal Health, and Production through initiating advisory and consultative processes. There will be an investigation of the current scenario in the field of Applied Science, Humanities, Agriculture, Animal Health & Production, and healthy deliberations on Future Perspectives in India and in the World. The event would provide an international forum for academicians, scientists, researchers, small entrepreneurs, and students of undergraduate and postgraduate to discuss critical issues and concerns about advanced and innovative technologies in Applied Science, Humanities, Agriculture, Animal Health, and Production.

While a global pandemic has been a looming risk for decades, COVID-19 has come as a shock to society, health systems, economies, and governments worldwide. In the midst of extraordinary challenges and uncertainty, and countless personal tragedies, scientists and researchers are under pressure to make decisions on managing the immediate impact of the pandemic and its consequences, decisions that will shape the state of the world for years to come. What might be the silver lining in the crisis and how might researchers use this moment to build a more prosperous, equitable, and sustainable world? To offer new perspectives on the post-pandemic future, in support of efforts to proactively and collectively shape the future in the field of Applied Science, Humanities, Agriculture, Animal Health & Production. The Topics of the event are:

Applied Science

Biotechnology, Microbiology, Industrial Drug Designing Formulation, Vaccine Technology, Biomedical Engineering, Bioinformatics, New Drug Delivery, Natural Products, and Ayurveda, Metabolic Disorders, Scope & Challenges in Pharmaceutical Industry, Artificial Intelligence, Machine Learning, ICTs, Artificial Intelligence, Computer Architecture, Embedded Systems & Games, Computer Graphics & Virtual Reality, Computer Modeling, Cloud Computing, Computer Security & Information Assurance, Data Structure, Data Communications, Network, Security Forensic, Data Compression and Encryption, Database System, Data Mining, Ecosystem functioning, Environmental Management, Impact on Biodiversity, Wetlands, Waste Management Environmental Health and Hygiene Issue, Socio-economic Condition, Climate Change, Environmental Sustainability, Environmental Toxicity, Remote Sensing and other Environmental Issues.

Humanities

Management & Commerce, Tourism & Hospitality, Travel Trade, Hospitality Management, ICT & Tourism, Tourism Sustainability, Quality Management, Rural Development, Entrepreneurship & Start-Up Management, Impact Assessment, Challenges in B2B and B2C, Economic Reforms & Sustainable Development, Green Marketing, Retail Marketing, Virtual Marketing, Office Management, Office

Automation Techniques, Retail Logistic Management, Social Science, Mass Communication, Social Media Management Marketing Management, Operational Management, Human Resource Management, Financial Control, Marketing Management & Digitization Banking & Insurance, Modern Banking Practices, Contemporary Trade Practices.

Agriculture

Agroforestry, Soil Science, Soil management, Plant Nutrition, Fertilization, Agronomy, Water: Management of Irrigation Strategies, Water Recycling: Benefits and Risks, Smart Farming: Environmentally Management of Crop Production, Food Security and Safety/ Challenges and Opportunities, Horticultural Practices and Urban Agriculture for Sustainable Food Security, Post-Harvest Technologies for Reducing Food Losses, Sustainable Cities, Climate Change and Human Health, Dairy Technology Dairy Science, Agricultural Processing Technology, Crop Processing, Organic Agriculture, Agro Biotechnology. Livestock and Fisheries, Opportunities In Farm and Rural Entrepreneurship, Secondary Agricultural Processing Sector, Processing and Value Addition In Agri-Food Industry, Agri Infrastructure Processing and Marketing. Plant Protection.

Animal Health and Production Veterinary Science

Nutraceuticals and Functional Foods Food Biotechnology, Veterinary Science and Animal Husbandry: Veterinary Physiology, Veterinary Biochemistry, Anatomy, Pharmacology, Pathology, Parasitology, Microbiology, Public Health, Surgery and Radiology, Obstetrics and Gynaecology, Medicine, Livestock Production Management, Livestock Products Technology, Animal Nutrition, Animal Genetics, and Breeding.

For further details, contact Organising Secretary, Banaras Hindu University, Varanasi-221005 (Uttar Pradesh), Mobile No: 9567435800 / 9815070337 / 9935851495/ 8188944324, E-mail: *ashaa.rgsc@gmail.com.* For updates, log on to: *www.bhu.ac.in/events.*

National Workshop on Statistical Analysis of Data Using 'R'

A ten-day Online National Workshop on 'Statistical Analysis of Data using 'R' for Research, Planning and Development' is being organized by the A.K. Dasgupta Centre for Planning and Development, Visva-Bharati during September 05-14, 2022. The aim of the event is to familiarize academicians, practitioners, and researchers with the statistical research tools and techniques, with a special focus on the Software 'R'. The event will augment the skill of the participants to use 'R' and enhance the horizon of their research work. The knowledge of modern techniques applied to research is imperative for quality work and the workshop aims to give a comprehensive insight into those and enable researchers and academicians to apply those techniques rightly. The research scholars, faculty members of colleges and universities, and management executives who wish to deepen their understanding of the subject may participate in the event. The faculties and teachers, consultants and administrators engaged in Higher Education Institute, Industry training professionals, Research Scholars, Students, Extension specialists in agriculture, public health and rural development practitioners, and Consultants in the development sector may be benefited. The Course Outlines are:

- Introduction to 'R'.
- Entering and Editing of Data.
- Reading Data, Manipulating Data, Saving of Data.
- Variable, Relationships, Visualizations of Data. Coding of Data.
- Exploratory Data Analysis: Correlations, Regression.
- Z-test, T-test, Chi-square Test, Inferential Statistics.
- Analyzing Categorical Variables.
- Cluster Analysis, Factor Analysis, Log-linear Models Discriminant Analysis, Logistic Regression, and Other Multivaraite Analysis Techniques.
- Analysis of Data with Repeated Measures.
- ANOVA.

For further details, contact Organising Secretary, A.K. Dasgupta Centre for Planning and Development, Visva-Bharati, Santiniketan-731204 (West Bengal), E-mail: *vbplanning46@gmail.com.* For updates, log on to: *www.visvabharati.ac.in/event* ❑

Book Review

Highly Recommended Reference for Teachers

Harjeet Kaur Bhatia*

A Lesson plan is a guide or an advance organiser for a teacher to decide about various pedagogical dimensions like goals/objectives, content, activities, resources, evaluation, etc., for taking students on the desired path. It serves as a road map for the teacher regarding what and how students and she herself learns during class time. It helps her/him to confidently and efficiently design and implement meaningful and engaging learning experiences for the class. It gives a learning trajectory for a lesson or a detailed description of learning events for a class. It is a skill relying on the creativity of the teacher with various components (like technology, subject to be covered, etc., finding a place based on the preference of the teacher, and the needs of the students. Bawa and Chauhan introduce their book by highlighting the factors like developments in the field of technology, new theories, and the lack of availability of model plans that led to bringing out the present volume.

The book is divided into three sections. Section A deals with the theoretical bases of lesson planning. This section is further divided into seven chapters. The introduction and rationale of lesson planning, prerequisites of lesson planning, and implications of Piagetian and Vygotsky's theories are beautifully explained. The format of the lesson plan is also provided to help readers comprehend the various components and structure of a lesson plan. In the end, exercises are also given to help readers check their progress. Levels of educational objectives giving details of aims then moving on to the stage-wise, grade-wise, subject-wise, unit-wise, lesson-wise general, and specific instructional objectives. Taxonomies of the three aspects (cognitive, affective, and psychomotor) of students' growth have been

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* *Professor, Department of Educational Studies, Faculty of Education, Jamia Millia Islamia, New Delhi-110025. E-mail: hbhatia@jmi.ac.in*

discussed. The revised version of Bloom's taxonomy of cognitive domain should also have found a place or reference in this book. The use of taxonomies in practice would help teachers to develop a perspective for their utilization of these in the class, visualizing the interlinkages in all three aspects. As we focus on child-centered education in recent policy documents too, considering children as a whole as a unit the perspectives provided in the book may be very useful as they align with recent policy recommendations. The characteristics and manner of writing instructional objectives, and common mistakes while stating behavioral objectives are also discussed so as to help teachers learn to write objectives. Criticism of behavioral instructional objectives is also given to lead readers to explore new developments and theories for writing objectives/ learning outcomes for a lesson. Analyzed content in different formats using subject-based illustrations is also presented. Piaget's structured content analysis according to age-appropriate cognitive structures is given which aligns with pedagogic structure as per NEP---2020. Traditional teaching aids, classification of teaching aid with a mention of how they aid teaching-learning is also discussed. Mention of contemporary teaching learning material with a focus on technology, MOOCs, streaming, social networking, etc. is also made.

Section A puts forward theoretical orientation to increase understanding of key concepts and draw on a wide range of options to inform practice. However, if the focus could have been on learning aids or how these teaching aids help in the teaching-learning process, it would have added value.

In Section B model lesson plans have been presented. Unit I of Section B comprises Chapters eight and nine where problems of teaching English in India, components of lesson plans in prose and poetry along with flowchart of plan and text are discussed.

Various plans are given to illustrate continuity in lessons. Model plans are for elementary and senior secondary levels, which would be useful for teachers teaching at these levels. While giving a perspective on the teaching of English in Indian schools, it discusses the importance of English in Indian schools, teaching English as a second language giving an overview of methods and approaches to teaching English. It also identifies the current trend that has revolutionized language teaching related to grammar in use for appropriate situational context and various lessons illustrating this have been provided. This would be quite relevant for English teachers to have a comprehensive overview of prose, poetry, and grammar in use and how to use it in planning.

Unit II comprising Chapter ten is regarding Hindi language teaching. Various lesson plans related to prose, grammar, and writing skills are given to help teachers with various aspects of Hindi language teaching.

Unit III comprising Chapters eleven and twelve is related to the teaching of integrated science at the elementary level. It discusses various novel approaches like problem-solving, inquiry learning, collaborative learning, projects, etc. Illustrative lessons have been given. Concept mapping as an instructional strategy is showcased.

Unit IV comprising Chapter thirteen is regarding approaches to teaching social sciences at elementary and secondary levels. Here, challenges faced in the teaching of social sciences, various methods like role play, cooperative learning, problem-solving, etc. have been discussed and illustrative lessons have been provided.

Unit V comprising Chapter fourteen is regarding the approach to teaching mathematics at elementary and secondary levels where also model lessons have been provided.

In Section B in all five units, if at least one lesson plan utilizing constructivist theories and based on content that is not merely subject-specific, but is multidisciplinary or theme based, was also provided, it would have been in alignment with recent developments. How individual differences and plurality in the class can be addressed and used as a resource could also have been dealt with to help readers gain from the experience of expert authors in the field. The discussion about and putting forth novel methods and strategies like cooperative and collaborative learning, group work, etc. are in alignment with recommendations of National Education Policy--- 2020, which may help readers develop newer and engaging teaching methodologies.

Section C is appendices where appendix I is a checklist for developing a lesson plan and appendix II is 'Frequently Used Directional Words' which may be used by teachers while formulating a lesson plan. It may be very useful for the teachers so that they may not miss the details while planning a lesson. However, if a rubric was also provided describing the quality parameters of a lesson plan, it would have helped users to assess their current level and attempt to reach at next level, building on their strengths and overcoming weaknesses/ lacunae accelerating their learning journey.

The practical orientation along with theory has been dealt with quite well in the book. Though much is said about the relationship between theory and practice, many consider theory as an imaginable but unreachable state with nothing to do with everyday issues. In this book, however, an attempt has been made to integrate theoretical knowledge and utilise it to inform and shape practices/models/ experience-based knowledge using simple language. The book is highly recommended for teachers both pre-service and in service to understand the nuances of planning the lesson and benefit from the theoretical and experiential learning of various practicing academicians regarding different facets of lesson planning, that too in varied array subjects at different levels in the school.

The paperback edition of the volume is sure to prove a very useful and handy reference book for the scholars, academicians, and teachers engaged in schools and teacher education. ❑

THESES OF THE MONTH

SCIENCE & TECHNOLOGY
A List of doctoral theses accepted by Indian Universities
(Notifications received in AIU during the month of April-May, 2022)

AGRICULTURAL & VETERINARY SCIENCES

Biotechnology

1. Nayak, Tanmaya. **Bioremediation of chlorpyrifos using paddy field bacterial isolates: Genomic insight and combinatorial approach towards field application**. (Dr. Vishakha Raina), Department of Biotechnology, Kalinga Institute of Industrial Technology, Bhubaneswar.

BIOLOGICAL SCIENCES

Biotechnology

1. Gogoi, Akash Protim. **Activation and regulation of T-cells in Systematic Lupus Erythematosus (SLE)**. (Prof. Shashi Baruah), Department of Molecular Biology and Biotechnology, Tezpur University, Tezpur.

Botany

1. Himani, S. **Diversity and molecular characterization of xylariales in Chikkamagaluru District Karnataka**. (Dr. M Krishnappa), Department of Botany, Kuvempu University, Shankaraghatta.

EARTH SYSTEM SCIENCES

Environmental Science

1. Paul, Sarmistha. **Utilization of textile factory waste through vermicomposting: An assessment of metal accumulation traits and adaptability in two earthworm species**. (Dr. Satya Sundar Bhattacharya), Department of Environmental Science, Tezpur University, Tezpur.

2. Pimpalkar, Sarika Narayanrao. **Clarification of coal washery effluents by polymer flocculation**. (Prof. Gurdeep Singh and Prof. Nikkam Suresh), Department of Environmental Science & Engineering, Indian Institute of Technology, Dhanbad.

3. Singh, Astha. **Photocatalytic degradation of chlorhexidine digluconate: Parametric study to the photocatalytic activity**. (Prof. Brijesh Kumar Mishra), Department of Environmental Science & Engineering, Indian Institute of Technology, Dhanbad.

Geology

1. Behera, Girija Shankar. **Integrated geological and geostatistical modelling of Panchpatmali Bauxite Deposit, Damanjodi, Koraput District, Odisha**. (Prof. B C Sarkar), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

2. Khangar, Ranjit Gangadhar. **Study of petrographic facets and adsorption behaviour Shale Gas Reservoir in Jharia Basin, India**. (Prof. Atul Kumar Varma), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

3. Satyam, Gyan Prakash. **Neotechtonics and sendimentation dynamics of outer Himalayan quaternary sequences in and around Haridwar, Uttarakhand, India**. (Prof. Rajendra Kumar), Department of Applied Geology, Indian Institute of Technology, Dhanbad.

ENGINEERING SCIENCES

Civil Engineering

1. Das, Pragyan Paramita. **Bearing capacity estimation of ring footing on layered sand**. (Prof. Vishwas Nandkishor Khatri), Department of Civil Engineering, Indian Institute of Technology, Dhanbad.

Computer Science & Engineering

1. Kokku, Aruna Kumari. **Optimizing the migration of virtual machines within cloud computing systems**. (Dr. J K R Sastry), Department of Mathematics, Koneru Lakshmaiah Education Foundation, Guntur.

2. Chaudhury, Kumar Surjeet. **Novel approaches for load balancing techniques in cloud computing**. (Prof. Sabyasachi Pattnaik and Dr. A R Routray), Department of Computer Science, Fakir Mohan University, Balasore.

3. Nanda, Surendra Kumar. **Design of cellular Automata based cryptosystem for digital healthcare data in parallel computing environment**. (Dr. Suneeta Mohanty and Dr. Prasant Kumar Pattnaik), Department of Computer Science & Engineering, Kalinga Institute of Industrial Technology, Bhubaneswar.

4. Roy, Saugata. **Design and analysis of efficient mobile data collection protocols for wireless sensor networks**. (Prof. Rajendra Pamula), Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

5. Sharma, Rashmi Priya. **Study and optimization of big data processing models for crop productivity in India**. (Prof. Dharavath Ramesh), Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

6. Spruthi, K. **A novel approach for secure aware and energy efficient transmission in wireless sensor networks**. (Dr. T Narayana Shankar), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

7. Srinivas, Katikireddy. **An effective system for thyroid data using amalgamation of clustering methods**. (Dr. K V D Kiran), Department of Computer Science & Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

8. Srinivas, Madana. **Design of mobility-based algorithms for wireless sensor networks**. (Prof. Tarachand Amgoth), Department of Computer Science & Engineering, Indian Institute of Technology, Dhanbad.

Electrical & Electronics Engineering

1. Kiranbabu, Vakkapatla. **Development and analysis of multiobjective thermal power generation scheduling algorithms**. (Dr. P Srinivasa Varma), Department of Electrical & Electronics Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

2. Paul, Chandan. **Soft computing techniques applied to renewable energy based combined heat power dispatch and hydro - thermal scheduling problems**. (Prof. Vivekananda Mukherjee), Department of Electrical Engineering, Indian Institute of Technology, Dhanbad.

3. Prakash, Chittapragada S. **Development of fundamental reference current control strategy based DSTATCOM for power quality improvement in distribution system**. (Dr. J Somlal), Department of Electrical & Electronics Engineering, Koneru Lakshmaiah Education Foundation, Guntur.

4. Rajesh Kumar. **Design and analysis of reconfigurable microwave amplifier for wireless application**. (Prof. Santanu Dwari), Department of Electronic Engineering, Indian Institute of Technology, Dhanbad.

5. Sahu, Nikesh Kumar. **Dielectric resonator antennas with improved isolation characteristics for MIMO applications**. (Prof.Ravi Kumar), Department of Electronic Engineering, Indian Institute of Technology, Dhanbad.

6. Sengar, Ram Veer Singh. **Model order approximation and controller design**. (Prof. Kalyan Chatterjee), Department of Electrical Engineering, Indian Institute of Technology, Dhanbad.

Food Engineering & Technology

1. Gupta, Arun Kumar. **Development of resistive sensor for maturity determination of Pomelo fruit (*Citrus grandis*) and laboratory scale device for debittering of citrus fruits**. (Prof. Poonam Mishra and Prof. P P Sahu), Department of Food Engineering and Technology, Tezpur University, Tezpur.

2. Khurshida, Singamayum. **Value addition of cassava (*Manihot Esculenta Crantz*) Cultivar of Manipur (India)**. (Prof. S C Deka and Prof. Nandan Sit), Department of Food Engineering and Technology, Tezpur University, Tezpur.

3. Marboh, Vegonia. **Characterization and value addition of sohphlang (*Flemingia Vestita*)**. (Prof. Charu Lata Mahanta), Department of Food Engineering and Technology, Tezpur University, Tezpur.

Mining Engineering

1. Khare, Rupali. **An integrated decision framework for assessment of urban transit oriented development in GIS environment coupled with machine learning techniques**. (Prof. Vasanta Govind Kumar Villuri), Department of Mining Engineering, Indian Institute of Technology, Dhanbad.

Petroleum Engineering

1. Abhinav Kumar. **Development of nano based Preformed Particle Gel (PPG) to improve performance of water shut - off jobs**. (Prof. Vikas Mahto and Prof. V P Sharma), Department of Petroleum Engineering, Indian Institute of Technology, Dhanbad.

MATHEMATICAL SCIENCES

Mathematics

1. Anil Kumar. **Study of heat transfer problems of nanofluid over a linear / nonlinear stretching sheet**. (Prof. Pentyala Srinivasa Rao), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

2. Das, Hirakjyoti. **Contributions to matching coefficients in q-products, congruences for fractional and restricted partition functions, and representations of integers by quadratic forms**. (Prof. Nayandeep Deka Baruah), Department of Mathematical Sciences, Tezpur University, Tezpur.

3. Gadamsetty, Revathi. **Hydrodynamic analysis of non-Newtonian lubrication of asymmetric rollers with and without thermal effects**. (Dr. S V

Subrahmanyam), Department of Mathematics, Koneru Lakshmaiah Education Foundation, Guntur.

4. Gupta, Shubham. **Estimation of parameters using Shrinkage techniques with prior information**. (Prof. Gajendra Kr Vishwakarma), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

5. Mukhopadhyaya, Partha. **Some alternative estimation procedures using auxiliary information in sample surveys**. (Prof. G N Singh), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

MEDICAL SCIENCES

Ayurveda

1. Hansrajbhai, Sojeetra Niral. **A pharmaco-clinical evaluation of minapatrika (Pothos scandens linn): An extra-pharmacopoeial drug**. (Prof. R N Acharya), Department of Ayurved, Gujarat Ayurved University, Jamnagar.

2. Kirtigiri, Gunsai Kishangiri. **A pharmaco-clinical evaluation of devasundha (Pittosporum floribundum Wt and Arn): An extrapharmacopoeial drug**. (Prof. R N Acharya), Department of Ayurved, Gujarat Ayurved University, Jamnagar.

Dentistry

1. Kapoor, Shalini. **Reconstruction of interdental Papilla in esthetic zone using hyaluronic acid gel: A clinical perspective study**. (Prof. Amit Bhardwaj), Department of Periodontology, Shree Guru Gobind Singh Tricentenary University, Gurugram.

Medicine

1. Poleboina, Sumathi. **Effect of selenium and gold nanoparticles on diabetes and ovariectomy induced osteoporosis**. (Dr. K B Tikoo), Department of Pharmacology and Toxicology, National Institute of Pharmaceutical Education and Research, Mohali.

2. Sonawane, Meena Yogesh. **Evaluation of new early predictive biomarkers for estimation of GFR in various renal disorder**. (Dr. A P Thorat), Department of Medicine, Maharashtra University of Health Sciences, Nashik.

PHYSICAL SCIENCES

Chemistry

1. Bajiri, Mohammed Abdullah Mohammed. **Studies on multifunctional nanoparticles as photocatalysts in presence of solar energy**. (Dr. H S Bhojya Naik), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.

2. Baruah, Satyajit Dey. **Co oxidation over bare and zeolite supported metal' atoms and clusters using QM and QM/MM approaches**. (Prof.Ramesh Ch Deka), Department of Chemical Science, Tezpur University, Tezpur.

3. Begum, Saheen Shehnaz. **Computational insights on structure and dynamics of anti-cancer drugs and their controlled released mediated by drug delivery agents**. (Prof. Ramesh Ch Deka), Department of Chemical Science, Tezpur University, Tezpur.

4. Boruah, Kabita. **Studies on functionalised ionic liquid based materials and illustration of their physicochemical properties**. (Prof. Ruli Borah), Department of Chemical Sciences, Tezpur University, Tezpur.

5. Dutta, Nipu. **Development of hybrid nanocomposites based on synthetic polymers and materials from re newable souces**. (Prof. T K Maji), Department of Chemical Science, Tezpur University, Tezpur.

6. Gagoi, Plabita. **Development of polymetric drug delivery system for anti cancer agents**. (Prof. Tarun K Maji), Department of Chemical Sciences, Tezpur University, Tezpur.

7. Halder, Tanmoy. **Chemical syntheses of the oligosaccharide repeating units of some bacterial O antigens**. (Prof. Somnath Yadav), Department of Chemistry and Chemical Biology, Indian Institute of Technology, Dhanbad.

8. Roy, Arpita. **Hydrogels/nanocomposites based on β-cyclodextrin and their potential application in biomedical field**. (Prof. Sagar Pal), Department of Chemistry and Chemical Biology, Indian Institute of Technology, Dhanbad.

9. Sumadevi, K R. **Studies on optical and photocatalytic activities of metal doped nanoparticles**. (Dr. G Krishnamurthy and Dr. H S Bhojya Naik), Department of Industrial Chemistry, Kuvempu University, Shankaraghatta.

Physics

1. Gautam, Nayana. **Phenomenological study of active and sterile neutrino in the context of latest neutrino and cosmology data**. (Prof. Mrinal Kumar Das), Department of Physics, Tezpur University, Tezpur.

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APPOINTMENTS

Shri Yashwantrao Bhonsale Education Society's

YASHWANTRAO BHONSALE COLLEGE OF PHARMACY

A/p Charathe (Vazarwadi), Tal. Sawantwadi Dist. Sindhudurg. 416510. Ph. No.02363-272233/272299. website - www.sybesbpharmacy.com, Email - ybpharmacy@gmail.com

(Approved by AICTE, PCI, New Delhi, Govt of Maharashtra DTE & Affiliated to MSBTE & Mumbai University)

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS FROM THE ACADEMIC YEAR 2022-23

UN-AIDED

No.	Cadre	Subject	Total No.of Posts	Total No.of Posts	Post Reserved for
01	Professor	Pharmaceutical Chemistry	01	02	01- SC
		Pharmaceutics	01		01- Open
02	Associate Professor	Pharmaceutics	01	05	01- SC
		Pharmacology	01		01- DT(A)
		Pharmacognosy	01		01-OBC
		Pharmaceutical Analysis	01		01- EWS
		Pharmacy	01		01- Open
03	Assistant Professor	Pharmaceutical Chemistry	05	15	02- SC
		Pharmaceutics	05		01- ST
		Pharmacology	02		01- DT(A)
		Pharmacognosy	01		01- NT (B)
		Pharmacy	01		01- NT©
					04-OBC
					02-EWS
04	Librarian	-	01		03-OPen

The above posts are open to all, however candidates from any category can apply for the post. Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10th March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dated 05th July, 2019. Candidiate having knowledge of Marathi will be preferred.

The Educational Qualification, Experience & pay-scale for the post of Professor & Associate Professor, Assistant Professor & Librarian are as prescribed by the University of Mumbai, AICTE form time to time.

Please refer University Circular No. मशिमाक/विशिमाक/तंत्रशिक्षण/११/२०२०−२१, दिनांक ११ जानेवारी २०२१ for qualification and experience at the time of interview.

Applicants who are ready employed must send their application through proper channel. Applicants are required to account for breaks, if any in their academic career.

Applications with full details should reach to the **SECRETARY, Shri. Yashwantrao Bhonsale Education Society's YASHWANTRAO BHONSALE COLLEGE OF PHARMACY, At. Post:- Charathe (Vazarwadi) Tal:- Sawantwadi** within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Mr. Sanjeev I. Desai.
Secretary
Shri Yashwantrao Bhonsale Education Society

BISHOP HEBER COLLEGE (Autonomous)
Tiruchirappalli – 620 017, Tamil Nadu, India

Advertisement for the Post of Project Associate

Applications are invited for a temporary manpower position (*Project Associate-I)* for the project entitled **"Soliton Dynamics in Homogeneous and Inhomogeneous Nonlinear Optical Systems: Soliton Synchronization and Birth of Rogue Waves with Application to Optical Computing"** funded by the Science and Engineering Research Board (SERB), DST, Government of India.

Qualifications: M.Sc. in Physics with consistently good academic record. Candidates who have qualified NET/ GATE (or some national level examinations) and having prior experience in Nonlinear Dynamics will be given preference. Non-NET/Non-GATE candidates can also apply.

Period of project: 3 years

Emoluments: As per the SERB-DST norms

Principal Investigator: Dr. T. Kanna

Interested candidates may send their application along with his/her bio-data including photocopies of mark sheets, NET/GATE certificate, list of publications, awards, etc., either by post or by email to the Principal Investigator [Dr. T. Kanna, Assistant Professor of Physics, Bishop Heber College, Tiruchirappalli–620 017, Tamil Nadu, India (E-mail: **kanna_phy@bhc.edu.in**)], **within 15 days** from the date of publication of this advertisement. For more details visit **www. bhc.edu.in.**

The short-listed candidates will be called for an interview. No TA/DA shall be given to the candidates appearing for the interview. The appointment will be coterminous with the project.

Shriram Pratishthan's
Dr. Ram Rodge College of Education
Selu, Tq. Selu, Dist. Parbhani

WANTED

Applications are invited for the post of Assistant Professor in **Dr. Ram Rodge College of Education, Selu, Tq. Selu, Dist. Parbhani** run by **Shriram Pratishthan, Selu, Tq. Selu, Dist. Parbhani** (Permanent Non-Grant). Eligible candidates should submit their application with all necessary documents within **Fifteen days** from the date of publication of the Advertisement by Registered post only. The reserved candidates are to send a copy of application to the Assistant Registrar Special Cell, S.R.T.M. University, Nanded-431606.

Sr. No.	Name of Post	Subjects	Qualification	Name of Post	Reservation
01	Assistant Professor	Perspectives in Education	M.A./M.Sc./NET/SET/ PH.D	04	OPEN-05
02	Assistant Professor	Pedagogy Subjects Math, Science, Social Science Language	M.A./M.Sc./NET/SET/ PH.D.	08	SC-02 ST-01
03	Assistant Professor	Health and Physical Education	M.A., M.Sc. M.P.Ed./ NET/SET/PH.D.	01	VJ(A)-01, NT(C)-01
04	Assistant Professor	Performing Arts (Music/Dance/Theatre) Fine Arts	M.A. Fine Art, M.A. Music/ NET/ SET/PH.D..	01	OBC-03 EWS-01

Educational Qualification:
Assistant Professor:
1. Good academic record are 55% marks at P.G. degree level and SET/NET Pass or Ph.D. degree as per UGC Regulations of 2009.
Scale and allowances:
   As per the norms of UGC, Maharashtra Govt., & SRTM University, Nanded.
Note :-
1) Prescribed application form is available on the University Website (**www.srtmun.ac**).
2) No. T.A./D.A. will be paid to candidates to attend the interview.
3) S.C./S.T. Candidates are eligible to apply even if they have 50% marks only at PG level degree.
4) 3% reservation for handicapped and 30% for women candidates.
5) Eligible Candidates those who are already in services should submit their application through proper channel.
6) Ph.D. Candidates who were awarded degree prior to Dt. 19 Sep, 1991 are eligible even if they have 50% marks at P.G. level.
Address for Correspondence: -
Shriram Pratishthan's, Dr. Ram Rodge College of Education,
Vidyavihar Educational Campus, Rawalgaon Road, Selu, Tq. Selu, Dist. Parbhani
Ph.No.02451-223552, 222289; M-9422175353/ 8605928904/9923070753.

Sd/-
Secretary
Shriram Pratishthan, Selu

Sarswati Bahuuddeshiya Sevabhavi Sanstha, Gojegaon
Rajeshwarrao Patil B.Ed. College Education, Mukramabad
Tq. Mukhed, Dist. Nanded – 431 719

Applications are invited from eligible candidates for the following post in **Rajeshwarrao Patil B.Ed. College Education, Mukramabad (Permanent Non-Granted).** Eligible candidates should submit their application with all necessary documents **within 15 days** from the date of publication of this advertisement to the Secretary, Sarswati Bahuuddeshiya Sevabhavi Sanstha, Gojegaon, Tq. Mukhed, Dist. Nanded, Pin – 431 719.

Sr. No.	Designation	No. of Posts	Reservation
01	Principal	01	Unreserved

Note:-

1. Educational qualification and service conditions as per National Council for Teacher Education (NCTE) Regulation 2014. The Candidate shall process the following qualification :-
i) Postgraduate Degree in Arts/Science/Social Sciences/Humanities/Commerce with minimum 55% Marks.
ii) M.Ed. with minimum 55%.
iii) Ph.D. in Education or in any pedagogic subject offered in the institution.
iv) Ten years of Teaching experience in a Secondary Teacher Education Institution.

Desirable :- Diploma/Degree in Educational Administration or Educational Leadership.
Salary & Allowance :- Pay Scale and service conditions as per the existing rules of U.G.C., Govt. of Maharashtra and Swami Ramanand Teerth Marathwada University, Nanded.
Note:-
1. Prescribe Application form is available on university Website **(www.srtmun.ac.in).**
2. No TA/DA will be paid for attending interview.
3. Eligible candidates those who are already in service should apply through proper channel.
4. Incomplete application will not be entertained.
5. All Attested Xerox copies of certificates, other relevant documents should be attached with the application form.
Address of Correspondence
Secretary
Sarswati Bahuuddeshiya Sevabhavi Sanstha, Gojegaon, Tq. Mukhed, Dist. Nanded, Pin – 431719, Maharashtra.

Secretary

SOUNDARYA EDUCATIONAL TRUST(R)
SOUNDARYA INSTITUTE OF MANAGEMENT AND SCIENCE
Soundaryanagar, Bangalore - 560 073
Website: www.soundaryainstitutions.in/sims
Ph: 080-29510260/29510261

Applications are invited from the Indian Nationals for MBA programme.

Sl. No.	Name of the post	Qualification required	Nature	Category	No. of post
1.	**DIRECTOR for MBA programme**	MBA/ Ph.D. with 15 years of experience	Regular	General	01
2.	**PROFESSOR**	MBA/ Ph.D. with 12 years of experience	Regular	General	01
3.	**ASSOCIATE PROFESSORS**	MBA/ Ph.D. with 10 years of experience	Regular	General SC/ST	01 01
4.	**ASSISTANT PROFESSORS**	MBA/ Ph.D. with 5 years of experience	Regular	General OBC	01 01

Salary as per AICTE norms

Interested candidates may send their applications along with a recent passport size photograph and copies of testimonials to *hr@soundaryainstitutions.in* **on** or before **30th August 2022.**

Sri Keerthan Kumar. M
CEO
Soundarya Educational Trust®
Ph: 9964514873

ST. JOSEPH VAZ EDUCATIONAL SOCIETY

St. Joseph Vaz College

Cortalim, Goa - 403 710

Applications are invited in **online mode** from Indian Nationals for the following Teaching Posts:-

I. Regular/Full-time post:
1. College Librarian — 01 Post

II. Contract basis posts:
1. Assistant Professor in Physics — 01 Post
2. Assistant Professor in Chemistry — 01 Post
3. Assistant Professor in Botany — 02 Posts

III. Lecture basis posts:
1. Assistant Professor in Chemistry — 01 Post
2. Assistant Professor in Botany — 01 Post
3. Assistant Professor in Environmental Studies — 01 Post

Essential Qualification: As per UGC, Goa University and DHE.

Other Requirements: Knowledge of Konkani and valid 15 years of Residence Certificate in Goa is essential. Knowledge of Marathi is desirable.

The link to apply for the Teaching posts: **https://stjosephvazcollege.in/vacancies/**

Candidates already employed shall upload their applications through proper channel. The right to fill up the above mentioned post is reserved.

Detailed information can be viewed on the college website: **www.stjosephvazcollege.in**.

Applications for all the above posts are to be submitted **within 15 days** from the date of publication of this advertisement. It is to be noted that the applications are to be submitted in **online mode only.** Late submission or incomplete applications in any manner will not be accepted.

Date: 13.08.2022

ADMINISTRATOR