



Rs. 30.00
ISSN-0566-2257

UNIVERSITY NEWS

A Weekly Journal of Higher Education

Association of Indian Universities

Vol. 60 • No. 27 • July 04-10, 2022

K Paddayya

India's Soft Power: Its Place in the Modern World

Jai Ranjit, Divya Vijaychandran, Solange Suri, and Anando Dutta

Essence of Sense: Curriculum and Syllabus of Life Skills Programme
in Liberal Arts

S Jebah Suganthi and S Prabu Shankar

Concept Mapping Strategy for Facilitating Science Learning

Ram Nath Kovind

Let's Embrace Each Challenge as an Opportunity for Self-transformation

- Convocation Address

Srinivas K Saidapur

Need to be Taken Seriously

- Book Review

Fr Xavier Alphonse, S J

Education - Empowerment - Employment: Community College Movement
in India 25 Years (1996 - 2021)

- Communication

#Let'sBeatCoronaTogether



CENTRAL UNIVERSITY OF HARYANA

(Established vide Act No. 25 (2009) of Parliament)

Village: Jant-Pali, Distt: Mahendergarh (Haryana)-123031

Advertisement No. 03/NT/R/2022

Dated: 21-06-2022

EMPLOYMENT NOTICE

Online applications are invited, from the eligible candidates for appointment to the following posts on regular basis as mentioned against each post.

POST CODE	NAME OF THE POST	LEVEL & GROUP	NO. OF POSTS & CATEGORY
01	Security Officer	Level - 7, Group - B	01 UR
02	Assistant Engineer	Level - 7, Group - B	01 UR
03	Private Secretary	Level - 7, Group - B	02 UR
04	Hindi Translator	Level - 6, Group - B	01 UR
05	Assistant	Level - 6, Group - B	01 SC
06	Personal Assistant	Level - 6, Group - B	02 UR; 01 OBC
07	Professional Assistant	Level - 6, Group - B	01 UR PwD (VH)
08	Senior Technical Assistant (Civil Engineering)	Level - 6, Group - B	01 UR
09	Senior Technical Assistant (Computer Science Engineering)	Level - 6, Group - B	01 UR
10	Senior Technical Assistant (Electrical Engineering)	Level - 6, Group - B	01 UR
11	Senior Technical Assistant (Printing & Packaging Technology)	Level - 6, Group - B	01 UR PwD (HH)
12	Statistical Assistant	Level - 5, Group - C	01 UR
13	Security Inspector	Level - 5, Group - C	01 UR
14	Technical Assistant (Computer) (For B.Ed. and M.Ed. programmes)	Level - 5, Group - C	01 UR
15	Technical Assistant (Civil Engineering)	Level - 5, Group - C	01 UR
16	Technical Assistant (Computer Science Engineering)	Level - 5, Group - C	01 UR
17	Technical Assistant (Electrical Engineering)	Level - 5, Group - C	01 UR
18	Technical Assistant (Printing & Packaging Technology)	Level - 5, Group - C	01 UR
19	Laboratory Assistant (For B.Ed. & M.Ed. programmes)	Level - 4, Group - C	01 UR
20	Laboratory Assistant (Civil Engineering)	Level - 4, Group - C	01 UR
21	Laboratory Assistant (Computer Science Engineering)	Level - 4, Group - C	01 UR
22	Laboratory Assistant (Electrical Engineering)	Level - 4, Group - C	01 UR
23	Laboratory Assistant (Printing & Packaging Technology)	Level - 4, Group - C	01 UR
24	Laboratory Assistant (Physical Sciences)	Level - 4, Group - C	01 UR
25	Laboratory Assistant (Chemical Sciences)	Level - 4, Group - C	01 UR
26	Laboratory Assistant (Biological Sciences)	Level - 4, Group - C	02 UR
27	Library Assistant	Level - 4, Group - C	02 UR
28	Lower Division Clerk	Level - 2, Group - C	01 EWS; 01 OBC; 01 SC
29	Hindi Typist	Level - 2, Group - C	01 UR PwD (OH)
30	M.T.S.	Level - 1, Group - C	01 UR, 01 EWS
31	Library Attendant	Level - 1, Group - C	01 UR; 01 SC
32	Kitchen Attendant	Level - 1, Group - C	01 UR PwD (HH)
33	Laboratory Attendant (For B.Ed. & M.Ed. programmes)	Level - 1, Group - C	01 UR PwD (OH)
34	Laboratory Attendant (Engineering/Science disciplines)	Level - 1, Group - C	01 UR PwD (OH); (For Electrical Engineering) 04 UR; 02 OBC; 01 SC

Online Application Form and other related details are available on the University's Website www.cuh.ac.in. Any further information in this regard shall be uploaded on the University's website only. The last date for submission of online application is **20.07.2022**.

Deputy Registrar (Establishment) (A/C)

In This Issue		
ITEMS		PAGE
Articles		
India's Soft Power: Its Place in the Modern World		3
Essence of Sense: Curriculum and Syllabus of Life Skills Programme in Liberal Arts		13
Concept Mapping Strategy for Facilitating Science Learning		19
Convocation Address		
Mizoram University, Aizawl		28
Campus News		
AIU News		36
Book Review		
Need to be Taken Seriously		37
Communication		
Education - Empowerment - Employment: Community College Movement in India 25 Years (1996 - 2021)		40
Theses of the Month (Humanities)		
		43
Advertisement		46

**New Subscription Tariff
 (Effective April 01, 2020)**

	Inland		Foreign	
	Institutions	Academics/ Students (at residential address only)	Airmail	Surface Mail
	Rs.	Rs.	US\$	US\$
1 year	1250.00	500.00	210.00	170.00
2 years	2200.00	900.00	400.00	300.00

Subscription is payable in advance by Bank Draft/MO only in favour of Association of Indian Universities, New Delhi.

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

Patron:

Prof. Suranjan Das

Editorial Committee Chairperson:

Dr (Ms) Pankaj Mittal

Editorial Committee:

Dr Baljit Singh Sekhon

Dr Amarendra Pani

Dr Youd Vir Singh

Editor:

Dr Sistla Rama Devi Pani

#Let'sBeatCoronaTogether

India's Soft Power: Its Place in the Modern World

K Paddayya*

“... we cannot but think that the future attainments of the natives (Indians) will be increased in extent as well as in variety by being as it were engrafted on their own previous knowledge and imbued with their own original and peculiar character” (Elphinstone, 1824).

It is perhaps advisable to begin by reassuring readers that the above statement is not part of the cacophony of opinions being expressed nowadays by both well-read and ill-informed people about our heritage from ancient India and its place in the modern world. Rather it is part of a powerful argument advanced two hundred years ago by one of the illustrious and enlightened colonial administrators who wrested the western part of the country from the hold of the Peshwas and handed it over to the East India Company. To be more precise, this statement was made by Mountstuart Elphinstone, the first Governor of Bombay Presidency, in a detailed letter which he addressed in 1824 to the Utilitarianism-led Court of Directors in London for defending the Hindoo College (nucleus of the present Deccan College) in Pune which he had established three years earlier exclusively for promoting the interests of ancient Indian learning (Elphinstone, 1824; for details, see Paddayya, 2002a). After the Presidency University in Kolkata, the Deccan College is the second institution of higher learning in the country to complete bicentenary in 2021.

Elphinstone's two-hundred-year-old observations bracketing India's future attainments with its ancient learning and distinctive character of its people gain a large measure of importance in the context of various official and unofficial efforts of more recent times to highlight our achievements in the past. As part of the ongoing *Azadi ka Amrit Mahotsav* meant for commemorating 75 years of the country's independence, the Ministry of Culture initiated a flagship scheme called 'Dhara: An Ode to Indian Knowledge Systems'. Through a series of lecture presentations and discussions this scheme seeks to highlight the notion of continuity in the domains of Indian culture and knowledge. Through a series of lecture presentations and discussions, this scheme seeks to highlight the notion of continuity in the domains of Indian culture and knowledge.

In the words of Govind Mohan, Secretary of the Ministry, “Our efforts through 'Dhara: An Ode to Indian Knowledge Systems' are aimed at starting these conversations and debates and ensuring that our collective history of achievements does not stay forgotten in the folder

* Emeritus Professor and Former Director, Deccan College (Deemed University), Pune- 411 006 (Maharashtra). E-mail: k.paddayya@gmail.com

of some withering manuscripts” (Mohan, 2022). One eagerly looks forward to learning more about the lectures and other presentations that have been planned and completed as part of this praiseworthy effort.

There is some truth in the comment that people in India do go to *mandir* or mosque but mostly miss the God. Likewise, it is also remarked by some that specialists in heritage studies do carry out much research and pile up publications but often allow the larger message emanating from our past to slither away without notice. As an Indian and as a student of Indian history and culture, I sometimes like to stray away from my specialist work in Stone Age prehistory and read some general books and writings dealing with ancient Indian thought, particularly philosophy. I have experienced much mind-bending from these readings. These learning experiences have even motivated me to write short essays on this topic on three occasions (Paddayya, 2002b, 2011, 2018). The present essay is yet another exploratory attempt to share my understanding of the nature of ancient Indian mind, its creative endeavours in the non-material or otherworldly realm and their relevance in modern world.

While the Ministry’s *Dhara* programme forms the context for this essay’s preparation, I have derived the actual inspiration from three older but illuminating articles written by two outstanding exponents of the country’s ancient thought and wisdom. These include two of Ananda Coomaraswamy’s papers titled “What has India Contributed to Human Welfare?” (1985a [1915]) and “On the Pertinence of Philosophy” (1989a [1936]). The third one is Radhakrishnan’s Inaugural Lecture titled “The World’s Unborn Soul” which he delivered in 1936 when he assumed charge as the Spalding Professor of Eastern Religions and Ethics at the University of Oxford (Radhakrishnan, 1936). The overall message conveyed by these classic writings is that the world, all its material comforts and advantages notwithstanding, is not a fully settled and happy place and that ancient Indian thought and its overwhelmingly spiritual orientation could play a mind-smoothing role. My own essay is an attempt to reach this important message in simple words to the society at large in India and outside. We shall first identify the essential attributes of the Indian mind or thought and then prise out from it noble and time-tested values or conceptual formulations which

encompass philosophical, religious, social and epistemological domains and could serve as lamp-posts for human lifeways.

The Ancient Indian Mind and its Attributes

Human mind’s creations assume both tangible and intangible forms. The latter represent the soft power of a nation and its people. This soft power comprises social, religious and philosophical thought, epistemologies, literary creations and oral traditions which include a variety of myths, legends, proverbs, aphorisms, parables, metaphors, etc. In many ways these soft creations of the mind mirror the *Weltanschauung* of the people. The Indian mind’s overwhelming preoccupation with soft creations has long been widely acknowledged. Here again spiritual thought holds pride of place. As remarked by Radhakrishnan (1958:xxiii), “Spiritual life is the true genius of India. Those who make the greatest appeal to the Indian mind are not the military conquerors, not the rich merchants or the great diplomats, but the holy sages, the *Rishis*. who embody spirituality at its finest and purest”. Radhakrishnan’s book *An Idealist View of Life* (1980) is entirely devoted to this topic. Gandhiji and many others too recognized the spiritual bent of the Indian mind.

The spiritual nature of the Indian mind is all-pervasive and cuts across both read and unread sections of the society. This is what Coomaraswamy was trying to highlight in his essay on “What has India Contributed to Human Welfare?” by way of drawing attention to the differential use of philosophy in India and the West. He wrote: “In Europe and America the study of Philosophy is regarded as an end in itself, and as such it seems of little importance to the ordinary man. In India, on the contrary, philosophy is not regarded primarily as a mental gymnastic, but rather and with deep religious conviction as our salvation (*moksha*) from the ignorance (*avidya*) which forever hides from our eyes the vision of reality. Philosophy is the key to the map of life by which are set forth the meaning of life and the means of attaining its goal...” (Coomaraswamy, 1985: 2-3).

The spiritual bent of the Indian mind has also been commented upon by numerous non-specialist writers and public leaders such as Gandhi and Nehru. In their book *The Indians: Portrait of a People* (2007) Sudhir and Katharina Kakar refer to cultural imagination as an important element of Indian

identity. It consists of myths and legends which are drawn particularly from the two epics and envisage a romantic way of life and context-dependent way of thinking. Gandhi called this cultural imagination the horizontal coordinate of history (Gokhale, 1972; Paddayya, 2019) and Ashis Nandy (2002) named it as History's Forgotten Doubles.

Nehru designated it as the Old Indian Tradition. He called his recognition of its presence among the unread masses of the country a true discovery and lamented its absence among the middle class people. Based upon his personal experiences gained from extensive tours across the length and breadth of the country during freedom struggle, he made a moving statement about this cultural tradition of the common people: "... Everywhere I found a cultural background which had exercised a powerful influence on their lives. The background was a mixture of popular philosophy, tradition, history, myth and legend... The old epics of India, the Ramayana and the Mahabharata and other books in popular translations and paraphrases, were widely known among the masses and every incident and story and moral in them was engraved on the popular mind and gave a richness and content to it (emphasis added)..." (Nehru, 1960: 55).

And of course this topic of the Indian mind has been dealt with in a detailed and authoritative way in a number of specialist writings. Among these the volumes under the series called *The Cultural Heritage of India* published by the Institute of Culture attached to the Ramakrishana Mission in Kolkata deserve special mention. Three volumes of this series were published in 1938 on the occasion of birth centenary of Sri Ramakrishna. These contained chapters on various aspects of Indian thought and culture, all written by one hundred senior and reputed Indian scholars who made distinguished contributions in their respective specialized areas. These volumes presented a true "panorama of the cultural history of India" and were soon acclaimed as a major and significant addition to the literature devoted to ancient Indian thought. Considering the wide recognition these volumes quickly received both in India and outside, the Institute elaborated the series and brought out six volumes between 1958 and 1986. Even after a lapse of four decades, these volumes still serve as a very authentic and valuable source of information about all aspects of the country's cultural heritage.

Surely, we also have a number of books written by individual authors from India and outside. Among these there are two publications which I find very readable and helpful to general students of Indian culture. These are *A Source Book of Indian Philosophy* (1957) by S. Radhakrishnan and Charles Moore and *The Indian Mind: Essentials of Indian Philosophy and Culture* (1967) edited by Charles Moore. Here again General Introduction dealing with history of Indian thought given in the former volume and Moore's introductory chapter on "The Comprehensive Indian Mind" in the second volume are particularly helpful in grasping the basic aspects of the Indian thought. In their General Introduction Radhakrishnan and Moore emphasize that Indian philosophy, the existence of different schools within it notwithstanding, has a distinct spirit of its own. They list its common attributes as follows: 1) heavy emphasis on the spiritual aspects of life rather than the materialistic issues; 2) close relationship of philosophy and life; 3) introspective attitude to reality; 4) idealism which treats reality as one and spiritual in character; 5) need to supplement reason with intuition for exploring the ultimate; 6) respectful attitude to authority and reliance on inherited traditions; and 7) synthetic approach to experience and reality (Radhakrishnan and Moore 1957: xxi to xxvi).

Moore's introduction in the other volume is a persuasive and open-ended invitation to the Westerners—equally applicable in the case of Indians themselves – to gain an understanding of India and its people through its philosophy and to appreciate its contribution to the totality of world's philosophical knowledge and wisdom. He praises the mind of India for "its richness, its variety, its profundity, its depth and its heights in the broad area of philosophy" (1967: 2). He further says that India's philosophical, religious and cultural traditions have moulded the Indian mind and provided the guiding principles of life across ages. These traditions have survived repeated foreign invasions and introduction of alien religions and cultural traditions.

After taking a rapid review of the development of ancient Indian thought from the Vedic to the scholastic period in the first millennium A.D. which saw the rise of many commentators and commentaries. Moore identifies as many as 17 attributes of Indian thought (Moore, 1967: 14-16). Some of these overlap

with the basic tenets of Indian philosophy mentioned above. The additional ones include: a) sacralizing attitude of the mind; b) intellectual, philosophical, religious, ethical and practical tolerance; c) infinite range of man's psychic capacities; d) subordination of ethics to spiritual realization; e) principles of non-violence, self-control, non-attachment and charity as governing factors of life; f) *Moksha* or spiritual realization prevailing over values of social life such as pleasure and material well-being; g) moral purifications as a prerequisite to knowledge acquisition; h) soliciting knowledge for purposes of transforming one's nature; i) enduring suffering as the path to spiritual emancipation; and j) *Yoga* as an essential item in the pursuit of spiritual truth.

Soft Power: Its Ideals and Values

The foregoing observations inevitably lead us to assert that India's place in the world rests not on its material discoveries and contributions but revolves around the soft creations of its mind or its thought stream. This thought stream serves as a pool from which issue various values, ideas and ideals. It is love of these ideas or wisdom rather than the love of knowledge which governs decision-making processes of the people (Coomaraswamy, 1985: 2-3). Radhakrishnan and Moore (1957: xxviii) caution us that this is an "effort to understand life and reality. But it is not as a piece of antiquarian investigation that we of today should study".

Yes, ancient Indian thought is not an antiquity but a living entity. It is not merely a topic for academic debates and treatises but forms part of the life of people themselves. It guides and shapes social, cultural, religious and other daily transactions. This is the Indian sense of the past or old Indian tradition. Our task now is one of identifying or tracking the principal ideals or values embodied in this soft power, with some of them achieving the status of formal concepts. We will begin with a clarification about designation of this soft power. The Dhara project being promoted by the Ministry aims to retrieve and showcase what they call ancient knowledge systems to the modern world. In my view the phrase knowledge systems is inadequate because in the strict sense of science knowledge refers to information or data sets about the material or empirical world. It leaves out the world of mind's soft creations in arts, philosophies, religions and literary world. For instance, the *Nasadiya Sukta* from the Rig Veda, viz. "At first was neither Being nor

Nonbeing. There was not air nor sky beyond... Then there was neither death nor immortality, nor was there the torch of night and day. The One breathed without breath by its impulse. Other than that there was nothing at all ..."— carries no knowledge in it but it is a great piece of contemplative thought. It is also true of *Pasayadana* of Sant Jnaneshwar and numerous other speculative thoughts. I prefer to group these great mental adventures under ancient Indian learning, because it encompasses the totality of ancient Indian mind's creative effort including knowledge systems.

In my limited knowledge, the Pune Philosopher Devidas Dattatreya Vadekar was one of the first writers who brought to surface this topic of Indian traditional values and their contemporary relevance. He contributed a detailed paper titled "The Indian Traditional Values and Their Indications for Education in India in the Modern Age of Science and Technology" to a seminar on "Modern Science and Technology and their Harmonizing with Indian Values and Traditions in the Context of a National System of Education for India" held by the Education Commission in Pune in May 1965 (Vadekar, 2002). He recognized three kinds of values emanating from ancient Indian thought, viz. a) intellectual-speculative values, b) social-cultural values, and c) moral-spiritual values. Vadekar also suggested ways and means of introducing these values in modern education at school and higher levels. He concluded by cautioning political leaders that "... no limits arising out of the so-called 'saintly' political ideas and ideals will be permitted to determine the scope and the limits of our research activities in science and technology ..." (Vadekar, 2002: 126). One does not know to what extent Vadekar's valuable suggestions have been put to use by the Government.

As dictated by its educational seminar context, Vadekar's effort was to highlight the role of traditional values in bringing about qualitative changes in the Indian educational system. In tune with the general purpose of my essay, it is possible to extend the scope of this topic of values to the society at large where the core ideas are already part of daily transactions. So we shall now slightly deviate from Vadekar and suggest a regrouping of the values and then reemphasize their importance in the present contexts of modernization, globalization and increasing levels of materialism and consumerism. Using as our basic source material the Vedic texts,

the two epics, Upanishads, Brahmasutras, Puranas, Buddhist and Jaina texts, and various commentaries that came up in subsequent centuries, one can identify three types of values, viz. philosophical or speculative, social and epistemological values. Our list is only representative and we shall consider below some illustrative examples of the three categories of values.

Speculative or Philosophical Values

Every ancient thought system advanced its own ideas on various general topics such as time, space, creation, and creator agency. Biblical thought, for instance, pronounced that God created the world in 4004 B.C. Ancient Indian thought considered this topic in a more elaborate way. As mentioned before, Nasadiya Sukta or Hymn of Creation put up a brilliant conception of an unknown agency or ineffable force that existed before creation itself. Basham (1991: 249) called it “One of the oldest surviving records of philosophic doubt in the history of the world, marks the development of a high stage of abstract thinking...”

Creation has variously been viewed as arising from cosmic sex, from water, from fire and from wind. In Bhagvadgita we come across *Purusha* and *Prakriti* as complementary agents of creation. These broadly remind us of Spinoza’s concepts of *Natura Naturans* and *Natura naturata*, respectively. *Purusha* is the creator and all-embracing force; *Prakriti* is his agent and plays an instrumental role in organizing the world. Creation is seen not as one single event but as movement of time, without a beginning and an end. In modern astronomy this view has a close parallel in the steady state theory of the universe advanced by Fred Hoyle and others, which stands in opposition to the Big Bang theory which held that universe was created some 15 billion years ago.

Indian cosmogony treated both space and time as limitless. The unknown vastness of universe is attested by modern astronomy’s discoveries of newer galaxies from time to time. Equally majestic is the Indian concept of time. Unlike Judaeo-Christian thought which provides for a short chronology of 6000 years for the world and linear movement of time, *Kala* or time in Indian thought is imperishable and cyclic. The concept of *Mahayuga* or the Great Cycle comprises four *yugas* and has a total duration of 4, 320, 000 years. The cycle *Mahayuga* concludes

with the end of *Kali yuga* and another *Mahayuga* commences *ad infinitum*.

The grandeur and largeness of speculative or contemplative thought initiated in the early Vedic period find their true culmination in the Upanishads. The Upanishadic thought about otherworldly matters has won for itself a special place in the world of learning. It has given us a number of brilliant ideas and concepts. The question-answer sessions testify to a broad sweep of the mind and highly developed rational outlook. Understanding of reality is achieved by aphoristic, mythical, etymological, analogical, dialogic and synthetic methods but, as with modern conception of scientific knowledge, it is not a closed but open-ended process (Ranade, 1968). Another noteworthy conception concerns the emphasis laid on truth. Truth is regarded as the only genuine pathway to the realization of the ultimate. In the Chandogya Upanishad there is the story of loose-natured Satyakama and her son who confessed ignorance about his father’s identity and, in appreciation of this candid confession, the teacher accepted him for initiation. This noble conception moved a person like Gandhi who titled his autobiography as *My Experiments with Truth*. He equated truth with God. The Upanishads also recognized that unity of existence cuts across the universe, no matter its vastness and manifold character. Nehru called this all-embracing conception of reality metaphysical democracy.

The concept of *Brahman*, as expounded in the Upanishads, has made the widest appeal to both Eastern and Western writers. In the Taittiriya Upanishad, asked by his son Bhrigu about the fit topic of inquiry, Varuna replies: “That spirit, from which these created beings proceed; having proceeded from it, they live; towards which they tend and in which they are ultimately absorbed; that spirit to know; that is *Brahman*”. *Brahman* is self-caused and is the root cause of everything. It is beyond sense perception and is characterized as *Sat-Chit-Ananda* (existence, knowledge or consciousness and bliss). Knowledge of *Brahman* is rated as the highest achievement and is seen as the true liberating force. Knowledge of *Brahman* is achieved by self-realization which is the central theme of Adi Sankara’s work *Atmavidya*. He prescribes *viveka* (discrimination), *vairagya* (renunciation) and six inner faculties of mind (calmness, self-control, etc.) as essential qualities for self-knowledge.

A true appreciation of these sublime thoughts about the larger issues of creation and ultimate reality has a truly humbling effect on our minds. We are persuaded to shed our egos by accepting how insignificant and transient our positions are in the entire process of creation. It is no wonder that these conceptions have deeply moved many minds across the world. The German Writer and Philosopher Schopenhauer wrote: "From every sentence of the Upanishads deep, original and sublime thoughts arise, and the whole is pervaded by high and holy and earnest spirit... In the whole world there is no study ... so beneficial and so elevating as that of the Upanishads ... The study of the Upanishads has been the solace of my life— it will be the solace of my death" (as quoted by Max Mueller, 2000: 226).

Indian art history too has a good number of studies which give us insights into the symbolic dimensions of architectural and iconographical forms. These symbolic meanings once again reflect the depth of understanding of reality embodied in the ancient mind and fertility of its imagination. Coomaraswamy warned that images were not gods and goddesses but only supports for contemplation about the absolute. Writing about the Buddha image, for instance, he warned: "... Remember that we are pilgrims come from some great distance to see God, that what we see will depend upon ourselves. We are to see not the likeness made by hands, but its transcendental archetype, we are to take part in a communion ... The image is one of Awakened and for our understanding who are still asleep..." (Coomaraswamy, 1986: 147-8).

Equally famous is Coomaraswamy's reading of the symbolism of Nataraja dance (1985b). The concept of Shiva's dance, symbolizing matter in motion and cosmic cycles of motion and destruction, has been viewed by physicists as an ancient Indian analogy anticipating quantum theory's recognition of the energy dance of subatomic particles (Capra, 1991). It is no surprise then that a large Nataraja image of bronze gifted by the Government of India has been installed at the entrance of the European Centre for Nuclear Research (CERN) in Geneva in 2004. One could cite many other examples of such symbolic interpretations of art forms. Taking cue from one of the *Abhangs* of Sant Jnaneshwar, Deshpande (1992) considered the hill-cut Kailash temple at Ellora as exemplification the Advaitic tenet of the unity of existence because the God, worshipper and the temple coalesce into one rock.

Let me also refer here to an interesting incident recorded by the famous cartoonist R. K. Laxman. While visiting England he sought an interview with the great Philosopher and Public Intellectual Bertrand Russell and was readily granted one. While welcoming Laxman at his home, Russell said 'your contribution is zero'. And he smoothed Laxman's astounded feelings by clarifying that what he meant was that ancient India gave the great concept of zero to the world of mathematics. We all know what this little circle does when it is suffixed to a numeral!

Social Values

Indian thought is also rich in social philosophy whose roots again can be traced back to Vedic times. Social philosophy is used here in a broad sense to cover ideas and values forming part of political, social, economic and legal affairs and transactions of people. The Vedic literature and the two epics are the oldest sources. To these may be added the Dharma-Sastras, Niti-Sastras and Artha-Sastras of the early centuries of Christian era. With Dharendra Mohan Datta's comprehensive essay titled "Some Philosophical Aspects of Indian Political, Legal and Economic Thought" serving as my main source (Datta, 1967a), I will briefly refer to some of the values of social life which run through these various texts.

Aparigraha or non-possessive attitude is an important attribute of the Indian mind. It is impossible to exaggerate its relevance in modern life which is pervaded by scams and over-consumerism. Gandhi referred to this ideal in the speeches he made in the Malabar region after entry to Vaikom (Shiva) temple was thrown open to all classes of the society. He made a pointed reference to the thought contained in the Ishopanishad and was even led to say that Hinduism would still survive even if by some accident all other texts perished. He was in particular fascinated by the precepts of all pervasiveness of God, pleasure in giving away things to others and need to abstain from the attitude of desiring things belonging to others (Gandhi, 2010: 650-5).

Gandhi again drew inspiration from ancient thought for the principle of *Ahimsa* or non-violence. While he may not have been considered for Nobel prize for peace, it is now part of world history that he used this soft weapon for liberating a whole country from well-entrenched colonial rule. And the world acknowledges Gandhi as the apostle of peace

and non-violence. Irrespective of Barak Obama's doubts about the efficacy of the principle of *Ahimsa* in the militantly strife-strewn modern world, all of us recognize the truth in Gandhi's warning that 'eye for eye approach can only make all of us blind at the end.' As pointed out by Bondurant (1988), the principle of *Ahimsa* can change the mind-sets of both the oppressor and the oppressed.

Dharma is one of the most significant concepts contributed by ancient India to the world thought. It is true that its meanings are many and varied. At the very basic level it stands for morality or righteousness which is an attribute that distinguishes humankind from animal world. *Dharma* as righteousness is relevant at all levels of human society. Our two epics Ramayana and Mahabharata are basically accounts which warn us of the drastic consequences that follow from Adharma or violation of *Dharma*. Irrespective of the degree of historicity of events contained in them, the two texts have acquired the status of icons in India and the various episodes and events filling them up project useful messages in the form of Dos and Dont's for conducting social relations at various levels. Sukhthankar's statement that Mahabharata is the very soul of India applies equally to Ramayana (Sukhthankar, 1951). In his address to the U. S. Congress the former Prime Minister P.V. Narasimha Rao drew attention to the place of the precept of *Lakshmanrekha* in international relations too.

In his paper on values mentioned earlier, Vadekar made a specific reference to the importance of the ideal of *Swadharmā*, i.e. one faithfully performing duties assigned to him. This *Swadharmā* concept is part of *Pasayadan* or epilogue which the famous medieval saint Jnaneshwar appended to his commentary on the Bhagavadgita called Jnaneshwari. This epilogue envisages several other ideals which are equally important for orderly and harmonious living, viz.. wicked giving up their crooked behaviour and developing love for good; disappearance of darkness cast by evil; universal friendship; and rise of the sun of True Religion. True to his Advaitic bent of mind, through his *Pasayadan* which is addressed to Universal God, Jnaneshwar seeks happiness not for himself but for the entire humanity. As such it has universal relevance (Belvalkar and Ranade, 1933: 138-9).

The Mauryan Monarch Ashoka was a genius of sorts and his *Dhamma* policy was an awesome

application and elaboration of the *Dharma* concept for public purposes. It comprises tenets or principles whose relevance cuts across times, peoples and nations — paternalistic attitude towards subjects; promotion of people's welfare as the governing motto; positive respect for other ways of life and faiths; conservation of nature; and abjuring violence at all levels. No wonder Ashoka received high encomiums from writers across the world. In some ways his *Dhamma* policy already anticipated the concept of scientific temper of mind promoted by Nehru (Paddayya, 2016).

Epistemological Traditions

We have all along been emphasizing that spiritualism and intuition constitute the fulcrum of Indian thought. But this is not to say that man's daily encounters with the empirical world were ignored. We are warned in the Ishopanishad against excesses of both worldliness and otherworldliness. In fact, right from the very beginning Indian thought has made an elaborate provision for epistemological approaches to reality. I will use another essay of D.N. Datta (1967b) and make a few remarks about the knowledge-seeking dimension of the Indian mind.

Cognition in its general sense is called *Jnana*. Validated cognition is *Prama* and its sources, as recognized by different schools, are perception, inference, authority, *upamana* (similarity), postulation and, of course, intuition. Gautama's *Nyayasutra* put forward a method of inquiry which comes close to the scientific method of Western philosophy. Doubt (*Samasya*) is the starting point of inquiry. A long and rigorous process is envisaged for removal of doubt and arriving at a *Vada* or full-fledged theory. This process consists of a number of clear and definite steps involving reasoning— use of all valid sources of knowledge; consideration of previously known theories; use of relevant examples acceptable to all; employment of a five-step method of discovery and proof; employing the hypothetical or postulational method for strengthening conclusions; and avoiding five kinds of material fallacies, three kinds of quibbles and twenty-four kinds of false analogies.

Buddhist and Jain epistemologies also provide for elaborate processes of inquiry. *Anekantavada* of Jain philosophy provides scope for multiple answers or theories for a particular *Samasya*. Then we must refer to the Buddhist theory of causation. Going well

beyond the unitary theory of causation, its *Patitca Samuppada* theory provides for a concatenation of multiple causative factors for explaining a major event or phenomenon. It already anticipated general systems theory of modern philosophy of science (Macey, 1992) and has relevance in both academic and public domains.

Conclusion

My essay is a non-specialist attempt to grasp the basic nature of the Indian mind and its products. Claims about ancient India's knowledge of genetic science, plastic surgery, nuclear warheads, aeroplanes, etc. are unauthenticated. Rightly, the Government ignored claims of *Yagnas* and *Mantras* being a remedy for COVID-19 eradication and instead listened to the voice of science and extended full and quick support to vaccine preparation and its nation-wide distribution. The real strength of Indian thought lies in its idealistic orientation where the mind roams freely and ponders over larger issues like creation and ultimate reality. Some of these spirit-oriented speculations are awe-inspiring and mind-elevating. Equally significant and ennobling are the various values and ideals of social philosophy which serve as the true mortar of social life at all levels. We have also noted that some of the ancient Indian epistemological traditions are very elaborate and closely approach the classical notions of the scientific method.

All these contributions constitute India's soft power. It is this soft power which motivated Max Mueller to make that famous statement extolling ancient India: "... If I were asked under what sky the human mind has most fully developed some of its choicest gifts, has most deeply pondered on the greatest problems of life, and has found solutions... I should point to India. And if I were to ask myself from what literature we, here in Europe ... may draw that corrective which is most wanted in order to make our inner life more perfect, more comprehensive, more universal, in fact, more human, a life not for this life only, but a transfigured and eternal life — again I should point to India" (Mueller, 2000: 6).

There are two reasons for reemphasizing the importance of values and ideals forming part of ancient Indian thought in the contemporary society. In tune with changing times, the Indian society has come out of its traditional garb and it too entered the credit-card, mail-order, mobile-phone and

internet age. While we are in no doubt about the larger benefits ensuing from these changes, one cannot at the same time ignore the appearance of some unwholesome developments. New materialism and overconsumption which go with affluence are very much in evidence. Social life too has started receiving some scars. Derelictions in family life, wasteful use of resources, increase in crime rate and new ways of misuse of power and public resources are some of these scars. Secondly, there is a new outburst of fetishism and militancy in the domain of religion which is being increasingly brought to the streets. The larger spiritual and ethical tenets we have been talking about in this presentation seem to be receding into background. These and other related developments call for steps to reintroduce the topic of traditional Indian values and ideals at the levels of both school curriculum and popular education. One or two volumes could be brought out specifically devoted to various ancient Indian values and ideals – their respective contexts of origin, meaning content and levels of applicability in the contemporary contexts. These would lay bare the true civilizational basis of India as a modern nation. Also, there is a real need for initiating a series of sociological investigations of the use of the past by different sections of the society.

The global human society too is in a state of ferment in different ways. The agony which Radhakrishnan expressed nearly a century ago is still valid and the world's true soul is yet to be born. Radhakrishnan admits that modern science and technology have brought the world together but this is in the physicalist rather than humanistic sense. As he says: "... And yet the sense mankind must become a community is still a casual whim, a vague aspiration not generally accepted as a conscious ideal or an urgent practical necessity moving us to feel the dignity of a common citizenship and the call of a common duty ..." (Radhakrishnan 1936: 4). He avers that true human unity is possible only through spiritual unity and suggests that Indian thought could serve "as a living force in shaping the soul of the modern man" (1936: 19).

In the nineteenth century Oriental thought caused in Europe a new wave of awakening which the French Scholar Raymond Schwab, after Edgar Quinet, called Oriental Renaissance. It brought to Europe "an antiquity more profound, more philosophical and more

poetical than that of Greece and Rome” (Schwab, 1984: 11). Considering the uncertainties, anxieties and disruptions that often crop up in the global society (the May 2022 gunning down of innocent school children in a Texas school not excluded), India’s soft power and the ideals and values enshrined in it (you may add to these Yoga, cinema themes, etc.) could exercise an ennobling influence on human minds and usher in a new phase of Oriental Renaissance. Here I am tempted to give the analogy of hunter with his quiver filled with arrows suitable for bringing down game animals of various sorts. India’s soft power too is a quiver containing many soft arrows which, as hinted by Max Mueller a century and half ago, could render human life more human.

Finally, I can easily guess that there will be people who will mock at the moralizing or preaching tone of my entire essay. Be that as it may, I must refer here to a bold statement made by Sir William Jones two centuries and a half ago. While delivering the Student’s Oration in Oxford University in 1773, i.e. a decade before landing on the Indian soil, he addressed a blunt remark to the scholars: “... let us remember, that the sole purpose and tendency of human knowledge is to make us serviceable to our friends, country and all mankind; that speculation is only commendable, as far as it may supply us with Wisdom and Valour in active life, and that all arts, literature, science cease to be laudable, as soon as they cease to be beneficial” (Jones, 1807: 13). In our own country, in an oration titled “The Ends and Aims of College Education” delivered on the occasion of Silver Jubilee of the Deccan College in 1893, Sir Ramakrishna Gopal Bhandarkar commended the ancient Indian educational ideals of *Vinaya* and *Samskara* which are aimed at training the feelings and faculties of man, leading to a well-ordered mind, good manners and humility (Bhandarkar, 1933: 468).¹

Notes

This essay is based on a lecture delivered by me at the Deccan College (Deemed University), Pune on 3rd June 2022. The lecture was organized jointly by the Deccan College and Deccan College Past Students’ Association as part of the ongoing Azadi Ka Amrit Mahotsav celebrations. I dedicate the essay to the memory of Professors S. M. Katre, H. D. Sankalia and Irawati Karve, who together through their single-minded dedication spread over three decades an *Advaitic* bent of mind transformed the Deccan-based undergraduate Deccan College into a Postgraduate and Research Institute of national and international standing.

References

1. Basham, A.,L. (1991). *The Wonder that was India*. Third Edition. New Delhi: Rupa and Co.
2. Belvalkar, S.,K. and Ranade, R.,D. (1933). *History of Indian Philosophy*, Volume 7, Part I. Poona: Aryabhushan Press.
3. Bhandarkar, R.G. (1933). The Ends and Aims of College Education. In *Collected Works of Sir R.G. Bhandarkar*, Volume 1 (N.B. Utgikar and V.G. Paranjpe Eds), pp. 461-475. Poona: Bhandarkar Oriental Research Institute. First Published in 1893.
4. Bondurant, Joan, B. (1988). *Conquest of Violence: Gandhian Philosophy of Conflict*. Princeton: Princeton University Press.
5. Capra, Fritjof (1991). *The Tao of Physics: An Exploration of Parallels between Modern Physics and Eastern Mysticism*. London: Flamingo. First published in 1975.
6. Coomaraswamy, A.,K. (1985a). What has India Contributed to Human Welfare? In *The Dance of Siva: Essays on Indian Art and Culture* (A.K. Coomaraswamy), pp. 1-13. New York : Dover Publication. First Published in 1915.
7. Coomaraswamy, A.K. (1985b). The Dance of Siva. In *The Dance of Siva: Essays on Indian Art and Culture* (A.K. Coomaraswamy), pp. 56-66. New York : Dover Publication. First Published in 1912.
8. Coomaraswamy, A.K. (1986). The Nature of Buddhist Art. In *Coomaraswamy I: Selected Papers (Traditional Art and Symbolism)* (R. Lipsey Ed.), pp. 147-78. Delhi: Oxford University Press. First published in 1938.
9. Coomaraswamy, A.K. (1989). On the Pertinence of Philosophy. In *What is Civilization and Other Essays* (A.K. Coomaraswamy), pp. 13-32. Delhi: Indira Gandhi National Centre for Arts. and Oxford University Press. First published in 1936.
10. (1958 to 1986). *Cultural Heritage of India*, Volume I to VI. Institute of Culture, Ramakrishna Mission, Calcutta.
11. Datta, D.,N. (1967a). Some Philosophical Aspects of Indian Political, Legal and Economic Thought. In *The Indian Mind: Essentials of Indian Philosophy and Culture* (C.A. Moore Ed.), pp. 267-298. Honolulu (Hawaii): East-West Press, University of Hawaii.
12. Datta, D.,N. (1967b). Epistemological Methods in Indian Philosophy. In *The Indian Mind: Essentials of Indian Philosophy and Culture* (C.A. Moore Ed.), pp. 118-135. Honolulu (Hawaii): East-West Press, University of Hawaii.
13. Deshpande, M.,N. (1992). Influence of the Philosophy of Sankaracharya on Hindu Temple Architecture and Symbolism. *Man and Environment* 28(1): 21-28.

14. Elphinstone, Mountstuart (1824). Letter dated 11th August, 1824 sent to Court of Directors (East India Company), London. Letter No. E/4/506 of Bombay Despatches. London: British Library.
15. Gandhi, M., K. (2010). *Great Works of Mahatma Gandhi*. Delhi : Jaico Publishers.
16. Gokhale, B.,G. (1972). Gandhi and History. *History and Theory* 11(2): 214-255.
17. Jones, William (1807). A Student's Oration. In *The Collected Works of Sir William Jones*, Volume I (Lord Teignmouth Ed.). London: John Stockdale and John Walker.
18. Kakar, S. and Kakar, K. (2007). *Indians: Portrait of a People*. New Delhi: Penguin Books.
19. Macey, J. (1992). *Mutual Causality in Buddhism and General Systems Theory: The Dharma of Natural Systems*. Albany: State University of New York Press.
20. Max Mueller, F. (2000). *India: What can it Teach Us?* New Delhi: Penguin Books. First published in 1882.
21. Mohan, Govind (2022). Heritage Gets its due. *The Indian Express* dated 9th April, 2022.
22. Moore, C., A. (Ed.) (1967). *The Indian Mind: Essentials of Indian Philosophy and Culture*. Honolulu (Hawaii): East-West Press, University of Hawaii.
23. Nandy, Ashis (2002). History's Forgotten Doubles. In *Romance of the State and the Fate of the Dissent in the Tropics* (Ashis Nandy), pp. 83-109. Originally published in *History and Theory* 34 (1985): 44-66.
24. Nehru, Jawaharlal (1960). *The Discovery of India*. London: Meridian Books.
25. Paddayya, K. (2002a). On Some Aspects of the Early History of the Deccan College, Pune. *Bulletin of the Deccan College Research Institute* 60-61 (2000-2001): 29-64.
26. Paddayya, K. (2002b). Ancient Indian Thought: A Component of Liberal Education. *University News* 39 (53) (31 December, 2001-6 January, 2002): 3-9.
27. Paddayya, K. (2011). The Place of the Past in the Indian Mind. *Journal of the Asiatic Society* (Kolkata) 53(1): 1-18.
28. Paddayya, K. (2016). On Nehru's Concept of Scientific Temper of Mind and its Place in Modern India. In *Revitalizing Indian Archaeology: Further Theoretical Essays*, Volume II (K. Paddayya), pp. 762-773. New Delhi: Aryan Books International.
29. Paddayya, K. (2018). Ancient Indian Ideals and Modern Realities. In *Indian Archaeology and Heritage Education: Historiographical and Sociological Dimensions* (K. Paddayya), pp. 405-421. New Delhi: Aryan Books International.
30. Paddayya, K. (2019). Mahatma Gandhi on the Past: Its Relevance for the Present and Future. *University News*, Volume 57, No. 43 (October 28-November 3): 3-9.
31. Radhakrishnan, S. (1936). The World's Unborn Soul. An Inaugural Lecture delivered before the University of Oxford on 20th October, 1936, pp. 3-31. Oxford: The Clarendon Press.
32. Radhakrishnan, S. (1958). Introduction. In *The Cultural Heritage of India*, Volume I, pp. xxiii-xxxvi. Kolkata: Institute of Culture, Ramakrishna Mission.
33. Radhakrishnan, S. (1980). *An Idealist View of Life*. London: Unwin Paperbacks. First published in 1932.
34. Radhakrishnan, S. and Moore, C.,A. (Eds). (1957). *A Source Book in Indian Philosophy*. Princeton: Princeton University Press.
35. Sukthankar, V.,S. (1957). *On the Meaning of the Mahabharata*. Bombay Asiatic Society.
36. Vadekar, D.,D. (2002). The Indian Traditional Values and their Indications for Education in India in the Modern Age of Science and Technology. *Indian Philosophical Quarterly* 29 (2 and 3): 117-132.
37. Ranade, R., D. (1960). *A Constructive Survey of Upanishadic Philosophy: Being an Introduction to the Thought of Upanishads*. Bombay: Bharatiya Vidya Bhavan. First Published in 1926.
38. Schwab, R. (1984). *The Oriental Renaissance: Europe's Rediscovery of India and the East 1680-1880*. Translated from French by G. Patterson-Back and V. Reinking. New York: Columbia University Press. □

Essence of Sense: Curriculum and Syllabus of Life Skills Programme in Liberal Arts

Jai Ranjit*, Divya Vijaychandran**, Solange Suri***, and Anando Dutta****

The human experience is a multi-faceted one, full of observations, possibilities and learning. Learning is how we integrate with the world around us as we attempt to understand our purpose in the universe and how it works. It is imperative that making sense through sense-making be understood as a critical part of the experiential learning process in this regard (Fig 1).

In the words of Sri Aurobindo and the Mother on Integral Education, “Education to be complete must have five principal aspects corresponding to the five principal activities of the human being; the physical, the vital, the mental, the psychic and the spiritual.” The journey one undertakes in the pursuit of these areas of thought requires more than just the observation of the world and all that is in it, or merely reading several books containing the thoughts and stories of humankind across time. It requires the activities of conversation, debate and reflection in order to fully elevate the understanding that the mind and soul must gain as they try to achieve an ideal state.

With this thought in mind, we attempted an experiment at School of Design and Innovation (ISDI), Atlas SkillTech University in 2018. Through discussions with faculty members, an elective course in Liberal Arts education took shape. With a focus on giving students the opportunity to explore beyond the silos of the typical liberal arts curriculum in existence, this course presented the opportunity for students to enter the realm of self-reflection through discussive and discursive, observational

and contemplative engagements in the classroom environment through the introduction of visual, verbal, reading, audio and video material as a starting point of knowledge accumulation through interpretation and individual expression.

A question of why this kind of experimentation is important is naturally expected, and we must answer it with more than just a whimsical hope for a more interesting learning experience. To fully understand the experiment and its outcomes, we must first understand the reasoning behind it. In the space of design studies, students are introduced to abstraction as an integral process in the pursuit of knowledge. The ability to balance abstraction and rationalization of information and experiences then becomes a vital component of the student’s learning arsenal. To be learning only technical information, histories and processes provides the student with only one side of the coin, and thus only half the value. By introducing a liberal arts’ perspective based on abstraction to the students’ learning path, their ability to see beyond the limits of rationalization to all the possibilities gives the student an empathic insight into themselves, their own biases and how they see the world. For the learner, going beyond the technical definition of a thing or process allows them to apply creative ideation and results in a more cohesive working approach and the possibility of solving problems with more clarity and innovative thinking.

Now that we have an understanding of the reasoning, we must understand the next iteration of the experiment and elective course itself. In 2019, the experiment was presented to a wider set of faculty members in the School of Design and Innovation, whose courses and experiences will be presented to provide insight and context. In the primary meeting, faculty were introduced to the Liberal Arts Course experiment by asking why learning needed to remain siloed or restrained within a subject orientation and nomenclature especially when it came to the realms of human experience. Faculty members were encouraged to create a twelve-week course that explored intellectual, philosophical, sensory and

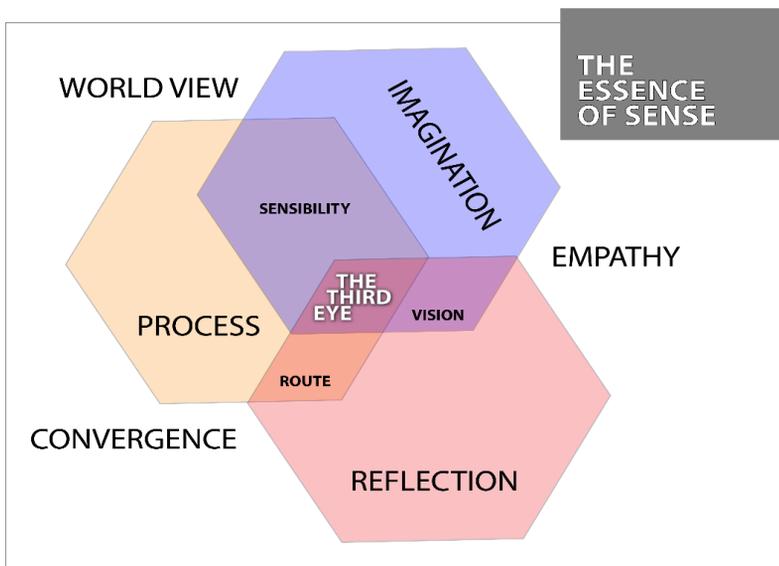
* Faculty, ATLAS Skill Tech University, Tower 1-Equinox Business Park, off Bandra-Kurla Complex, LBS Marg, Kurla West, Mumbai- 400070. E-mail: jai@isdi.in

** Faculty, ATLAS Skill Tech University, Tower 1-Equinox Business Park, off Bandra-Kurla Complex, LBS Marg, Kurla West, Mumbai- 400070. E-mail: divya@isdi.in

*** Faculty, ATLAS Skill Tech University, Tower 1-Equinox Business Park, off Bandra-Kurla Complex, LBS Marg, Kurla West, Mumbai- 400070. E-mail: solange@isdi.in

**** Faculty, ATLAS Skill Tech University, Tower 1-Equinox Business Park, off Bandra-Kurla Complex, LBS Marg, Kurla West, Mumbai- 400070. E-mail: anando@isdi.in

Fig 1: Learning Process



contextual areas of learning and experience based on a single word as a starting point. Here was an opportunity for opening each session differently, uniquely using one theme across different media – humanities and performing arts, science and meta sciences, contemporary as well as the speculative.

This led to much excitement as faculty now had a chance to bring to the classroom conversations that rarely found themselves in a safe space to be introduced or expanded upon. Some of the names of courses were words such as Unknown, Brevity, Gaze, Eureka!, #Hashtag, Maya, Conflict, Formless and many more. Each course consisted of in-class discussions, arguments, exercises and reflections as well as post-class assignments which saw the students expressing their reflections and takeaways through writing, visual art, performance, poetry, and so many more methods and media of expression.

Something important to note here is that these electives included students of the Sophomore, Junior and Senior years, creating a unique learning environment. One went another step ahead to propose that we should open the elective across disciplines as well. This widening of students group within a classroom introduced a higher possibility of cultural, intellectual and emotional exchanges, thereby benefiting everyone in different ways. Not only that, boundaries and hierarchies of age or superiority were removed – allowing participation free flowing, the representations and viewpoints independent and rich.

For the students, the process began with going through a list of the elective course titles and a one-line description of it in order to make their choices. This created an air of mystery and eliminated any preconceived notions, giving students a chance to learn without bias and with an open mind. Choices made, students entered the Liberal Arts Elective classroom for two hours once a week and began their unique journeys. To add to the twist – each session would be a different conversation in a new context or media using the same theme – which could mean the class could be discussing theatre or poetry, cinema or livelihoods, physics or politics or maybe something else,

something unexpected. This added to the element of surprise, heightened curiosity and kept the interest charged in every class.

In March, 2020, as the world entered quarantines and learning moved into the virtual classroom, these electives became a space for creative re-fueling and positivity. Students began to seek out deeper conversations with more varied contexts, and engaged with creative outputs at a high level of connectivity. Interpersonal discussions beyond the classroom between students and faculty seemed to be growing, leading to more clarity on the world and experiences lived through thus far. In 2021, the experiment was refreshed with new faculty bringing different courses to the table, giving students the chance to explore something new and further expand their hearts and minds, not to mention diving deeper into their own souls.

This was repeated at the beginning of the Spring semester for 2022, ensuring students would constantly have something new to explore and a new scope of enquiry, helping them in being better human beings in an ever-increasingly technological world. As technology brings us great power, those who wield it must understand the responsibility that comes with it. The students of today will be the ones wielding these powers and responsibilities tomorrow, and courses like these become pivotal in the development of a safer and more inclusive society on a planet that needs their help, their vision and

imagination, their idealism, approach and thinking systemically.

With this kind of learning being made available to students, it is easy to gloss over the impact it has on the educators leading the courses themselves. The benefit that these liberal arts courses bring to the faculty is immense, helping them expand their minds as a result of the research and preparation required while building the course material, verifying information and shaping class conversations. Training the trainer is of primary import if one is to effect transformation in the minds and hearts of the students who put trust in their teachers.

To provide insight into the Liberal Arts Elective experience, let's look into some of the courses that were carefully designed and executed. The ideal gateway into these courses is the abstracts that were presented to the students to help them make their choices.

UNKNOWN by Jai Ranjit

The universe is an enigma, and we may never fully understand it. Despite this, there is knowledge to be gained in entering the unknown even though we fear it.

Course Abstract

“The human experience is constantly classified, dissected and re-classified. As we journey through life, the seeking of answers remains constant. That said, how many of us actually understand the experiences we live through and gain? How many of us are actually actively participating in a process of internal empathy, recognition of the self and the external expression of the feelings and understandings we find ourselves amidst? Could the answer to the question “How do you feel today?” be “Pink Floyd”?

This 12 week elective program was designed to introduce students to the realm of philosophical inquiry into the human experience they live through, the senses they use on a daily basis and the ability to express themselves clearly and creatively as they try to convey their thoughts and feelings in a variety of manners and explorations.

Over the course of 12 weeks, students were introduced to philosophy as an area of study, and conversations began with an exploration of the

processes and ideas of Socrates, Plato & Aristotle, followed by a dive into the realm of science and how it evolved. By exploring things like Dialogue and the Dialectic, students found new ways to present ideas and challenge definitions. Then, an exploration of the mystery of sound, and how it affects our perception of the world around us as well as the lived experience within. In the following weeks, students were introduced to the idea of actions, choices and consequences, then colour and how it is perceived and manipulated. This was followed by an exploration of synesthesia and the principle of uncertainty, a questioning of reality, spirituality, power and balance.

In the final four weeks, the students were taken on a journey of self-discovery and reflection through a questioning of Spirituality, Religion, Ritual and Expression, a debate on Presence and Absence, feelings and manifestation of thought, and finally, the future and the fear of the unknown itself.

Students were given the opportunity to respond each week to the discussions in any medium they saw fit. What resulted from this allowance was nothing short of joyous. Students created paintings, poetry, stories, articles, recipes, videos and digital art as they explored themselves, what they didn't know previously and the materials and media they had once shied away from.

One of the major accomplishments of this whole experiment through this elective was how Avani Sabnis, a senior year student in Communication Design discipline found answers she was looking for while working on her final thesis project through the discussions and explorations. Her project is based on philosophical choices, with a civilisation building board game as an outcome, and through the duration of the elective course, she was able to flesh out and develop not only the concept of the game, but define its purpose, the definitions and contexts needed for it to be a gamified, playable experience with a learning outcome for the players through it.

In the normal course of her academic work in Communication Design Avani would have arrived at her goals, the journey would have been a long and tedious one – but not as participative or as enriched by her peers. The course such as this within the framework of Liberal Arts provided her with an opportunity to explore wider areas of interest and inquiry without impinging upon her core theory and

practice, thereby taking the pressure off her mind and letting the learning be organic and enjoyable, and thereby bringing more value to her work.

CONFLICT by Solange Suri

Course Abstract

“The journey of human life, from the womb to the tomb, is marked by conflict—conflict between ‘I’ and the ‘Other’ between ‘the citizen’ and ‘the state’; between ‘person’ and ‘the self’; between ‘the individual’ and ‘society’ and ‘the apparent’ and ‘the true’. Why must man find himself mired in conflict? Why must he forever find himself caught in between tough choices; and between the known and the unknown? If sorrow is a given in this world, why does man try to escape it? These questions and more, put us on a path of enquiry into our own nature and our relationship with the world. Is protracted and sometimes life-long conflict an inevitable suffering for the human spirit, or does it hold within itself a potentiality for transcendence?”

In and through this course, we will examine the human complex through the lens of conflict- its manifestations, its origins, its nature and its latent power for transcendence and personal evolution through a study of key chapters of the Bhagavad Gita and other related and philosophical texts.”

This course used conflict as a lens for initiating a philosophical inquiry into the nature of human existence; to understand what it means to live in a world we feel perceptually bound to, while also intuiting a higher reality. This sense that a higher reality exists serves as the foundation of a faith that allows us to transcend our limitations. Students examined the meaning of conflict, its many forms—both internal and external and in and through sharing of their own experiences with conflict, they realized that conflict is an unavoidable part of our lives and that it is complex in character.

That set the stage for embarking on a deeper inquiry into conflict: how do we examine it both within and outside of ourselves? Is conflict a bad thing or is it how we think about a conflict that is problematic? Here is where we began with a reading of chapters 1 and 2 of the Bhagavad Gita. The first chapter describes in great detail the state of mind of a great warrior like Arjuna when he stands in opposition to forces that have aligned themselves to

fight and defeat the pandavas. Looking at his own teacher, his grandfather and his cousins positioned as the enemy, he experiences an internal conflict and begins to question the very ethics of the war, forgetting that the fight is not personal. In and through the discourse of Krishna, students began to understand the many personality layers that come into play when we make an estimate of the situations that we find ourselves in life. They also understood that difficult times, times of grief and conflict are also ripe moments to embark on a spiritual quest... that grief can be a form of yoga and conflict can mark the commencement of a more evolved form of reconciliation.

We also looked at fine distinctions between sorrow and suffering and how all suffering is rooted in the delusions of the ego. Students, when asked to express their understanding of the relationship between grief and delusion, brought in a range of expressions in the form of poetry, song, film, story and art. It was exhilarating to see them make sense of these complexities by drawing from their own experiences, thereby making their aesthetic education an indirect, but natural outcome of this course.

BREVITY by Divya Vijaychandran

Course Abstract

“This elective will delve and explore the art of Brevity, looking at different mediums of expressions, explored through the lens of compression, concision and precision. The elective will begin with appreciation of succinct literary works, contemporary writings and micro fiction thereafter venturing into a journey of preciseness, conciseness and clarity in other creative realms like art, photography, films, games and design too with short, shorter and even shorter experiments and explorations.

The themes for this elective is based on the premise of traversing between the ‘may be or may be nots’. The liminalities, dualities and the in-betweens in the thoughts and ideas will be explored through the lens of art, architecture films, music, photography, literature and more.”

“Brevity is an art. And a vivid image conveys more than a long-winded explanation” – Mandy Wallace

In this day and age of data overload and dwindling attention spans, a short story, a quick read, a tweet, a micro story or even a meme gives some sense of gratification. With stories under 2000 characters, with news articles about 60 words, with ads that last 30 seconds - there is a whole new world of Brevity. The genre of brevity resonates with most today because it offers a glimpse into the complex ideas, diverse voices and stories in an easily consumable manner.

Students today present unique ways of thinking which often reflects the nuanced aspects of their growing up that is uninhibited by any constraints. A thinker is easily identifiable amongst many but to be able to identify a thinker with clarity of thoughts and specifically clarity in expressing these thoughts may be rare. However, when it comes to reflecting and expressing their ideas, they either tend to over communicate or tend to have a confused disordered format.

This elective delved and explored the art of brevity, looking at different media of expressions, explored through the lens of compression, concision and precision. The inspiration for each class across the 12 weeks were drawn from an extensive genre of creative nonfiction, contemporary writings and micro fiction thereafter venturing into a journey of preciseness, conciseness and clarity in other creative realms like art, photography, films, games, design and life too with crisp and short experiments and explorations. The appreciation of succinct literary and creative works helped set the context for further explorations primarily to reflect on their own writing styles then progressing towards diverse formats of expression.

The prompts for this elective, each week began with abstract concepts that felt visceral but led to deep inquiry and some profound discussions. The conversations were based on the premise of traversing between the ambiguity or uncertainty at the onset of an idea to more structured expressions. The liminalities, dualities and the in-betweens in the thoughts and ideas were being explored through the lens of postcards, proverbs, poems, comic strips, a personal oneiric world, self-portraiture and a speculative idea that led to scenarios in the world – building narratives.

Through the 12 weeks of this elective, the students were encouraged to have conversations

around many concepts and summarize their thoughts in the formats that either felt constrained or felt so open and unimpeded, that they felt the need to contain it in an appropriate format. The journey of this course led to a deeper understanding of weighing one's thoughts and representing or expressing it in a lighter format – visual or textual.

Through the last three semesters of being virtual, this concept of sharing, discussing, reflecting and expressing with clarity helped students explore myriad themes and each year of this elective evolved with experiments often displaying intriguing shifts in point of views and sometimes so many layers simplified. The elective also focused on the idea of finesse as opposed to volumes. There had to be a sense of levity in the writings and representation to allow oneself to have diverse viewpoints. There were so many variations in their perceptions that one would often be amazed at the mind's capacity to stretch so creatively.

The strongest learning from the elective was that the students determine the tone of the course. It is often the discussions that sets the pace and determines the experience in the learning. The course not only encouraged the students to interact but also allowed them to open their minds to worlds which they would have never imagined. In a wider context, it allowed them to time travel, reflect and connect with others in meaningful ways.

While the work we do as educators is important, it cannot be done in isolation. The words of our students carry tremendous weight, and it becomes vital to absorb their points of view. Equally important here, is to share those thoughts with you.

“Eye-opening, is something I would use to describe the elective “Unknown”. One would expect philosophy to be a drag or a boring topic. But the class was like only a few I have ever seen. There was a real back and forth of ideas and knowledge. The way the course was designed and the way it connected was a truly effective process. Jai Sir has always been the one to encourage discussion on ideas which is exactly what we did and learnt, not just from the formal course work, but from each other. On a more personal level, it helped me discover new things about myself that I had not given too much thought to. It gave me a way to express my thoughts and emotions through multiple mediums.”

– Avani Sabnis, Communication Design, 4th Year

“I had taken the following liberal arts electives : Blank, Imagined Realities and Duality. Throughout these electives I learned how to appreciate science fiction and draw some parallels to real life, learned how to be vigilant to upcoming trends in my surroundings as well as their aesthetics, through the Blank elective, I also began questioning why we procrastinate and began Imagining realities of our past in new ways that maybe could influence our future. The elective called Duality was an intriguing one as it opened my eyes to realise the duality in many aspects of human life and society. I discovered new ways to put forth these contrasting opinions and crazy thoughts and Ideas to my design and design thinking through the electives.”
 - Delaina Annie Fernandes, Product Design, 4th Year

“From this course, entitled Conflict, I understood what conflict is, how we could create it with our actions, constructively resolve it or avoid it. I also learned more about myself and how to become a better person and have a better life. The course helped me understand the problems that I face and how to find joy, purpose and meaning in life.”

- Saloni Rane, Communication Design, 2nd Year

“Pages of a blank book eagerly waiting for thoughts to be etched upon, this is what this elective, Art of Brevity encapsulated for me - a space to garner my thoughts, a place to energise, to take a step back and ponder. This course, mentored by Professor Divya Vijaychandran enabled me to push my literary writing capabilities. Her persistent guidance and warmth made this class something I’d look forward to amidst the week. Additionally, the themes that were explored helped me make profound connections with my peers and with myself thereby enabling me to produce outcomes in various formats which I partook immense joy in - my most cherished being a visual poem as the final submission! An elective I treasure, an elective if not taken will definitely give you the #FOMO!”

- Mahek Sewani, Fashion Design, 3rd Year

Some of our faculty and the courses they offered are given in table 1.

Table:1 Courses Offered by the Faculty

S No	Name of Faculty	Courses Offered
1.	Arun Lakra	Race
2.	Pooja Kaloi	Skin
3.	Jitendra Arora	Azaadi
4.	Divya Jaitly	Layers
5.	Amrita Ravimohan	Lens
6.	Isha Patel	Journeys
7.	Ram	Metaphor
8.	Sanjeev Das	Formless
9.	Surya Pratap	Oblivion
10.	Surya Pratap	Unstuck
11.	Surya Pratap	Hide and Seek
12.	Gaurav Shergill	Blank
13.	Nisha Chanda	Trait Ayug
14.	Jitendra Arora	Mise En Scene
15.	Prarthana Patil	Silence
16.	Shreyas More	Roots
17.	Sonam Parvani	Dot
18.	Gourav Keswani	Duality
19.	Utkarsha Malkar	Voices
20.	Shruti Maliwar	Gaze
21.	Shraddha Jadhav	Shift

Conclusion

In the wider context of learning, courses like these will benefit not just students of Design and Innovation, but also students across Atlas SkillTech University and India at large in times to come. With our world as dynamic and ever evolving as it is, the introduction of greater empathy, life skills and imagined resolutions in the learning process becomes more and more important if we are to work towards common goals and safer societies which are happier and more inclusive.

By understanding Duality, facing Conflict, thinking with more Brevity and tearing down the fear of the Unknown, among the many other courses and approaches, our students of today will surely visage a finer and equitable hope quotient for the future.



Concept Mapping Strategy for Facilitating Science Learning

S Jebah Suganthi* and S Prabu Shankar**

Science learning is an abstract process in which the learners develop varied cognitive frameworks for learning. Students learn effectively when they are engaged in an instructional process that is receptive to their prior knowledge (OECD, 2008). Science learning and achievement is a clear indicator of national development; the significance of science learning has been highlighted in all the national educational policy frameworks and documents. *Rashtriya Avshikar Abhiyan* (RAA) framework opines on nurturing creativity and inquiry, love for science learning, and effective use of Technology. Science is an interdisciplinary subject that collaborates and explores its relationship with all disciplines which results in innovative ideas, new practices, and various approaches to thinking about learning. National Educational Policy --2020 lays emphasis on conceptual understanding rather than rote learning. A conscious attempt must be performed by the learner to relate new knowledge with the previously learned concepts. Concept mapping is an effective instructional strategy created as a pictorial depiction to understand the concepts between the links. Meaningful learning is promoted effectively by concept mapping in which students become active learners and also recall the prior knowledge of the concept (Novak, 2003).

Concept mapping makes the subject content clear so that the students higher-order thinking and creativity are developed (Zimmerman, 2017). Concept mapping is a significantly more effective learning strategy than the conventional method in terms of overall achievement, knowledge, and understanding (Kilic,2013; Ademanai,2018; Jena,2019). In meaningful learning, the learner deliberately integrates the new concepts and proposition with related conception known earlier whereas in rote learning the pupil puts no effort

* *Research Scholar, Institute of Advanced Study in Education, Chennai – 600 015 (Tamil Nadu). E-mail: sjebahsuganthi@outlook.com.*

***Assistant Professor, Department of Education, Institute of Advanced Study in Education, Chennai – 600 015 (Tamil Nadu). E-mail: drsps.edn@gmail.com*

to assimilate new ideas with persisting ideas and unpredictably combine new information.

Preamble

Concept map is a pictorial visual representation that brings out the relation between the concepts and ideas. Visual representation helps the students to retain and recall the concepts as long-term memory aspects. A concept map enhances the student's understanding of a new concept. Concept maps exhibit different dimensional, with hierarchical node-linked images that depict the conceptual knowledge (Novak & Gowin,2000). A concept map is a system configuration that evolves meaningful learning by building knowledge and applying it to understanding. Active participation is the main aspect of own learning with its specified skills and strategies. Active refers to the learner being active in mind, constructing and reconstructing meaning from their experiences of phenomena in the laboratory and from their teacher's input. In concept mapping, the students with active participation have the autonomy and independence to control the learning process. Concept map encourages students to promote the active construction of abstract concepts. A concept map reflects the understanding of learners.

Besides the construction and assimilation of new knowledge, deeper and higher-order learning stimulates the student's critical thinking capacity (Conceica, & Taylor, 2007).In science learning, comprehension extends well beyond memorising discrete facts and concepts. The integration of facts, concepts, and scientific investigation are deep scientific understanding. Concept mapping urges to establish how the key contents are related to each other. Concept mapping is approximately related to Constructivist learning perspectives. Learners on their own, must hierarchically arrange the concepts and interlink the concepts using linking words and complete it individually or with the peer group. A sequence structure of knowledge evolves.

Origin of Concept Map

Concept map was popularized with science

educators by Joseph Novak and Bob Gowin in the year 1972 at Cornell University which is grounded on meaningful learning theories by Ausubel. The Ausubel Cognitive psychology's primary premise is that learning takes place when new concepts and propositions are integrated into current conceptions and positions adhered by the student (Novak, 1984,1990). This is also called as Novakian Concept map. The notion of information as knowledge construction is, that the students pursue their experiences, inconsistent with a focus on meaningful learning. In constructivist learning, students engage actively in psychological processes which involve concentration on the relevant new knowledge, intellectually structuring into a meaningful representation, and conceptually linking it to the existing knowledge. When students create links between the new knowledge they are learning and their prior knowledge, they grasp the concept. Particularly, new information is combined with pre-existing schemes and cognitive frameworks. Interpreting, illustrating, categorizing, summarising, inferring, contrasting, and describing are all cognitive processes that come under the domain of

understanding. Novak, & Musonda, (1991) Cornell University has identified that it difficult to find out the specific changes in students' understanding of science concepts. It is based on learning the Psychology of Ausubel. The best technique to convey children's conceptual understanding is to use a concept map to describe their knowledge. Cognitive processing organization denotes the learner's knowledge structure. The Centre for Human and Machine Cognition developed a Camp tool, a concept mapping software. Students can easily design schematic nodes representing the concepts to connect the nodes using arrows and linking words to establish a web structure of connected assertions.

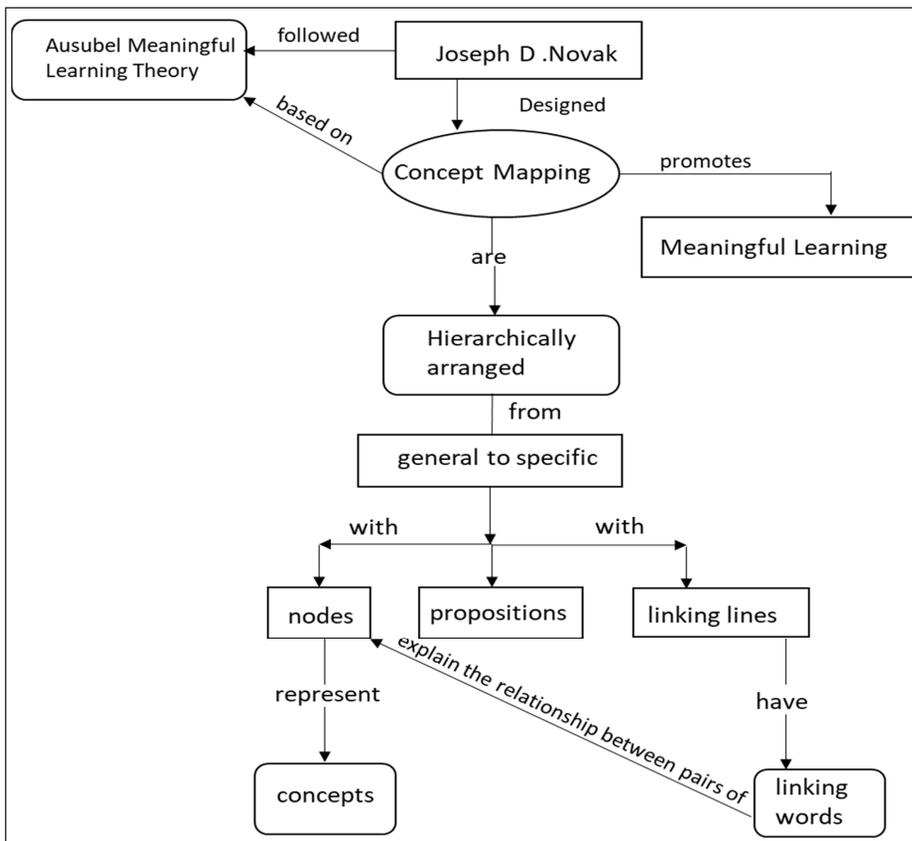
Rationale of Concept Mapping in Learning

Learning depends on selecting important information and organizing it as best possible but ascending to success in learning does not end there. Well-organized information is just an image unless it is associated with each other. Concept mapping fosters learning and memory. By making associations the information is no longer unpredictable or independent and is more easily learned (Nesbit &

Adescope, 2006) Concept maps show a positive influence on children's learning, especially in science learning. Each individual writes the notion together in ways that make sense to them and these are based on each person's prior learning experience. One of the values of concept mapping is it can be observed literally how an individual perceives and constructs the information by the manner the keywords are arranged.

Students cogitate about the inter-relation among the science concepts being studied and the meaning of scientific terms and enabling them to better organize what they learn and to cache and retrieve the information

Figure 1: Descriptors of Concept Mapping (Jebah, 2022)



more effectively. By concept mapping technique the teacher can probe for deeper understanding and can obtain a true assessment of the student's understanding of the particular content. Children construct knowledge within their social settings and learn through social interaction. This is later recreated and internalized and becomes a part of the thought process (Vygotsky, 1978). The unique aspect of visual learning is the learner has the ability to perceive, recognize and understand the networking information.

The United States National Science Education Standards point up that science should be inquiry-based and adapted to meet the interests, abilities, and experiences of the learner. It emphasizes that science teachers should use strategies that develop science understanding through the community of learners and help the students become responsible for their own learning. The American Association for the Advancement of Science proclaimed to concentrate on students' progress in meaningful learning of science rather than to complete innumerable science topics. Students need to think deeply about central concepts, themes, and principles of science.

Why Concept Map as A Learning Strategy?

Students learn literally the science concepts exactly from textbooks with no understanding of the facts and concepts. They fail to obscure the scientific concepts and their relationships to retain long-term memory throughout their learning process. Ausubel, (1968), Novak, (1997) reiterate only meaningful learning which will enhance science learning by associating with prior knowledge than rote memorization. Concept mapping assimilates and articulates new ideas and the ability to think and develop self-directed learning. The learner is capable of constructing knowledge on their own. Schema learning reminds us that learning has biological as well as social aspects. The brain has the ability to process information, capture store, and retrieve information that makes learning possible.

The learner speculates, being active in constructing their own knowledge and understanding. The internal thinking process of the learner is developed. Linking information with something already established in our memory allows us to recall the information and use it in another context. Working with the facts, writing or organizing them,

and adding associations to them helps the learner to remember and understand the concepts. Note-taking with a concept map creates strong memory patterns which visualize the concepts and their relationship. The performance level of lower ability students can be improved by a concept mapping strategy. The perceptual process of learning highlights to organize the information into a meaningful context to promote long-term memory. Concept mapping improves the visualization skill by remembering information in the physical form and images rather than in words. The mental patterns serve as building blocks of conscious thought.

Prior Knowledge in Learning

Prior knowledge is beginning with what the learner knows. It is the fundamental building block of the subject content and skill understanding and serves as an intellectual foundation for acquiring new information. Dochy (1988) outlined various conceptual reasons why previous knowledge might be the foremost learning assist. The learners with similar understanding may be better equipped to arrange the content in explicit memory. The reduced recall patterns in the cognitive structure storing the knowledge can come from the construction of a connection between the recently acquired information and previously learned information.

Accessibility to existing understanding while learning new information can minimize the burden on memory retention and enable more tasks to be completed within the stipulated duration. Previous knowledge can deliberately focus attention, allowing greater meaningful information to be analysed whereas less information can be neglected. The relevant information throughout the learning process is increased by the previous understanding. The recall of information from memory is often assisted by the stimulation of past knowledge in a certain domain. Prior knowledge could take the form of a well-organized conceptual framework that directs schema and helps in the storage and retrieval of the content. Dochy & Alexander (1995) highlights that previous knowledge encompasses the learner's entire cognition, including implicit and explicit knowledge, cognitive strategies, and conceptualization.

Prior apprehension has three aspects in learning. First, it is the use of known to unknown concepts. Secondly, it is about what a learner has

already known, what the learner believes I know, and what the learner is interested to know. Thirdly it shows what learners want to know and what learned. A simple visual representation that graphically presents the information can be utilized to compare the learner's previous understanding. Based on the structure it represents the relationship among content such as hierarchies or subcategories. The learner builds on what they already know and then they create, construct, and reconstruct their prior knowledge of what they have learnt in their past and combine it with their current scenario.

Features of Concept Map

(Novak, 2002) Concepts are defined as regularities or patterns outlined and illustrated in shapes. Students inhibit learning by organizing the information following an outline. Concepts are described as sequence patterns in phenomena that are indicated by representation. Conceptualization is something that is imagined. It could be a concept, a broad idea, or a system of ideas. When learners think of ideas they determine a new pattern in experience or materials and give them labels or indicators to indicate them.

Representational System Organizes information into one or more of the following patterns. Hierarchy, sequence, matrix, and illustration. Representations are created for the reason of structure relationship so that the subject content could be understood easily.

Hierarchy indicates hierarchical order from top to bottom, revealing super-ordinate and subordinate relationships.

Sequence refers to the information placed in a sequence from the left to the right arrangement which reveals order relationships – what comes first, second, third, and so on with arrows pointing left to right between each step in the sequence.

Matrix organizes the information in rows and columns based on its classification and reveals a comparative relationship. It shows relationships within and across the topics. Matrices are the ideal representation.

Nodes which is depicted as circles or boxes. They are sequentially placed as general nodes followed by specific nodes.

Focus question indicates the question to be explored using a concept map. It is a guideline of the concept map to understand a particular concept.

Propositional Structures are statements of two or more words that combine to form the meaning of a concept. A concept map visually exudes a set of propositions about a particular topic.

Linking words/phrases explains the relationship between the pair of concepts in the nodes. It generally contains a verb word such as “contains”, “requires” and “composed of”.

Parking Lot assists to identify the key concepts that are to be added before initiating to create a concept map. It is arranged in sequential order from the general concept to the specific. The list mentioned in the sequence order is known as the parking lot which can be placed on the map where it can be linked to the relevant concept.

Crosslinks show the relationship between concepts in different domains. Crosslinks are connections, linking the ideas in diverse domains of a network diagram that allows seeing how ideas in this domain are related. The cross-links and hierarchical structure both encourage creativity and also cross-links frequently signify innovative ideas.

Classification of Concept Mapping

As per Novak, and Gowin, (1984 concept maps are drawn depending on the approach we adopt, where the concept map is linked to central concepts by branches. The way we construct a concept map facilitates the emergence of new information and connections.

Spider Concept Map: In this concept map the branches descend outward in a radial pattern. It is organized by centralizing the main topic and having relevant information surrounding the centre of the map.

Hierarchy Concept Map: The content in this sort of concept map is presented in descending based on its importance. The majority of the information is provided on the highest end.

Flow Chart Concept Map: It organises the content in a logical or vertical order beginning with the main information at the start. They can be used to represent complex processes and can help students identify various stages and sub-stages of a process.

System Concept Map: The major parts of the concept map are connected by arrows to represent how the concept is interrelated. The structure resembles more web-like but not needed to spiral outward like a spider map.

Studies on Concept Mapping and Related Variables

Learner establishes knowledge by participating actively in the learning process adequately than passively absorbing information. As they develop an understanding of their daily experience the learner improves their knowledge. They gain new information significance by connecting it to what they have already learned. Learners bring their own knowledge and expertise to the subject content and when they perceive that their present understanding is insufficient, they create meanings or interpretations to take account of their abilities (Schulte, 1996).

Transfer of knowledge specifies meaningful learning. The concept map is a graphical display that is utilized to sort out and represent knowledge (Novak, 1990) The students' knowledge level has increased in constructing the mathematical proofs, which is due to the impact of the concept map (Majuma, 2019). Slow learners become efficient learners to prepare their own concept maps in learning photosynthesis process in biology subject which mapping helps to identify their learning difficulties and to clear their mistakes.

The concept map is utilized for the assessment in which student becomes capable to link theoretical knowledge with practical knowledge. (Kinchin et al 2019). Concept mapping assessment examines the student's level of grasping the difficulty and association of the concepts. It estimates the stability and creative ability of students in STEM. (Zimmerman, 2020). In a concept map proposition is the assertion of connecting two or more concepts in a meaningful sentence. A set of concepts on the biological topic were provided to the students which manipulate their formative or summative assessments. The concepts are organized in a hierarchical manner with its crosslinks. The students get deep knowledge of understanding of Concept Map to implement the usage of linking phrase that brings meaningful relationships. (Jonassen, D. H. 2007).

Concept mapping facilitates long-term recall of biological understanding to be mastery of the

subject. Concept mapping is an effective learning strategy that is essential for students to look into the association between abstract concepts and concrete ones. Concrete concepts can be easily learned by superficial knowledge whereas abstract concepts require deeper profound knowledge (James, 2006).

Concept maps serve as the best assessment tool to measure the higher level of thinking skills such as Analysis, Evaluation, and Creation. (Ghani et al 2017). Indrajit, (2019) attempted a study on concept mapping strategy which has revealed that the overall performance was remarkable by following concept mapping strategy. It reduces the mental pressure in learning and the level of confidence has increased in learning life science concepts. Retention refers to the ability to recall knowledge in the same manner that it was presented during learning. Transfer refers to the ability to apply what has been learned to solve new problems, answer queries, or assist in the study of a new subject matter is referred as a transfer. Students must recollect what they have learnt and also must be consciously aware of the concept and execute it (Mayer, 2002 & Haskell, 2001). The students must intend the process model and place more emphasis on the node relationships and how to mark them. They must also keep track of their progress. Learners with more experience appear to be able to complete these activities more quickly and with better results. (Hilbert, & Renkel, 2008).

The concept map can be created by the concept mapping tool which has resource feasibility in terms of text, images with vivacity, etc. A concept map can be created with the phrasal words given from the concept Novak & Canas (2007). Computer-assisted concept mapping is a constructive strategy in creating concept maps rather than using paper-pencil both concept mapping and ICT learning collaboration bring out successful learning achievement. It helps the learner indicate its corresponding proposition to represent the concepts.

Based on a review of the study by Johannes & Aksela (2008) chemistry teachers suggest computer-based concept mapping proves to be an effective learning successor and exploration tool. In the ICT learning domain, a computer-based concept map facilitates to the enhancement of their comprehension of chemical concepts and assists them to create links among abstract concepts. Although there is

affirmative progress in computer-based concept mapping there is also a contradiction in the usage of concept mapping tools programme as learners face difficulty in organizing the content from the network in a hierarchical manner. The instructor must provide guidelines to pupils to create their concept map using computer applications.

Learners should organize their concept mapping process and emphasize the relationships between the nodes and identify them in order to understand well using concept mapping they must also maintain observation of their progress in learning. Learners who have enough experience with concept mapping are able to complete their tasks more rapidly and effectively. Continuous practice gives good experience to present an excellent concept map. The cognitive ability of an individual while creating concept mapping reveals that subject matter-related organizing and regulating are correlated to get better learning achievements. (Hilbert & Renkel 2008). Learning stress and failure can also be reduced by students who are liable to utilize concept maps as an active learning strategy to improve their learning performance. (Susan & Turner, 2007 & Simone et al, 2001).

Dmshinskaia et.al (2020) in their study reveals the content and method of providing feedback to peers can also have an impact on the process. Evaluating peer's work is a part of inquiry learning. Inquiry learning establishes scientific reasoning and promotes conceptual understanding among the learners. It is a valuable strategy for teaching science that allows pupils to investigate a topic in a way that encourages scientific investigation. When compared to conventional instruction approaches concept mapping as inquiry learning to increase students proves engagement with the content and contributes to improved learning outcomes. (Jaakkola & Veermans 2014).

By using concept maps collaborative learning fosters interaction between the students. They explore and exchange ideas to establish a meaningful relationship between the content of the concept. Collaborative learning includes the added value of generating new ideas to understand the concept. They co-construct their conceptual thinking into a visual representation. It strengthens the knowledge construction process of every individual with their own prior knowledge. It promotes higher-order questioning and analytical skills.

Students in collaborative concept map learning perform the task and grasp actively together in a batch, investigating the concepts, clarifying and refining them with each other results in better retention than traditional teaching methods. As a result of its collaborative, student-centered approach the concept mapping pedagogical method aids students in enhancing performance in learning the concept it minimizes the mental pressure and improves the extent of assertiveness to succeed in the overall performance of learning.

Concept mapping promotes development in the cognitive processes and progress in academic achievement in science learning. A concept map serves as an effective instructional tool that has positive assistance in science learning and also enhances the comprehensive accomplishment in learning science. (Indrejit & Sahoo. K.C 2019). Learning involves developing multiple representations of ideas that integrate understanding. Learner while learning a concept construct a column, writes about their exploration, and creates a presentation to express their ideas. Writing, presenting, and manipulating are examples of different representations. The three activities require the construction of understanding into three different formats- concrete, textual, and graphical representation. When the learner creates a relationship among these representations, they develop an integrated understanding that can be applied to the new situation (Joseph & Charlene, 2008).

Web-based Tools for Concept Mapping

With web-based concept maps the learner can not only reimagine the concepts and their linkages but also promptly and readily construct the concept map as a depiction of their thought process in learning. The learner can easily create alterations with further setup of the map-creating task. This directs learning resources ahead from conceptual mapping techniques toward enhanced content learning (Pernaa and Aksela 2008). By using technology software to create a concept map the learner can add, erase, revise or assign the text in an appropriate position more easily than in paper-pencil mode. It depends on learner accessibility. Web-based concept mapping tools are:

- **CMAP** is developed by Institute for Human and Machine Cognition (IHMC) in Florida for

creating concept maps. It helps students to create conceptual connections. It enables students, and teachers to learn individually or collaboratively to exhibit their understanding among their peers and teammates. IHMC has initiated an array of public servers which is accessible free of cost for educational purposes.

- **CMAP** is connected to the related domain and other means such as images, videos and homepages. C-map tool transmits the concept maps to HTML format which is appropriate for browsing the web. (Novak & Canas, A.J 2007)
- **Google Docs** assist in creating concept maps by adding information arrows, and pattern using drawing option. These maps can be downloaded into various file formats and archived on Google drive for unlimited.
- **Inspiration** is one of the visual thinking tools that helps to generate the ideas and organise the concepts in the learning process.
- **Mindomo** is used to create a mind map, concept map, and outlines which are enabled to convert maps into diagrams. It has a varied formatting system in fonts and mapping.
- **Cacoo** tool can be accessed effectively in collaborative learning which is similar to google docs and sheets. Interactive learning and feedback promote faster learning and understanding of the concepts.
- **XMind** helps to brainstorm ideas, organise knowledge, and to manage the assignment, and also promotes teamwork. It transfers the map to formats like Word document, PDF, Power Point, and Excel. It allows the learner to analyse the propositions and the collection of maps with peers and to discuss with them the mapping representation.

Students who developed the electronic form of concept mapping are easily addressable to represent the concepts. Inspiration software is very useful to students as it reduces the unwieldy and tedious task to delete, rewriting, and to begin with a new template. It provides greater freedom to change the learner's conceptual thinking and the representation aligned on the map (Simone De, 2007).

Teacher and Learner in Concept Mapping

Ausubel (1968) suggests pedagogies in which

there is effective communication, the student learns relevant material and knowledge development is carried out independently. A teacher can encourage their students to develop their learning in a creative and relevant way by bridging the gap between theory and practice during this process. Concept mapping facilitates in the acquisition, elaboration, structuring, and presentation of domain knowledge. By embedding multimedia in concept mapping software, students are supposed to more clearly explain their knowledge in ways that are equivalent to their own cognitive representations, leading to concept maps that have higher cognitive fidelity.

The teacher must be competent, able, and inclined to learn and also must be knowledgeable and experienced in the subject they wish to teach in a substantial manner. It also enables the teacher to mediate the development and generation of new ideas. Both teacher and learner can comprehend the conceptual framework of a domain and their own knowledge, utilizing concept maps to outline and manage the instructional activity while exposing the technique to the learner promotes cognitive learning. The teacher reviews the map created by the learner and provides feedback assessment so that the student can develop the learning process. The crucial practice of concept mapping creates a depth of understanding of the difficult concepts in learning.

Futuristic Scope of Concept Mapping

In consonance with NEP–2020, education ought to holistically evolve a student constructively and achieve the task. The learning strategy must develop the intellectual, also concrete aspects of the learners and develop their thought processes. Classroom practices play a major role to refine the learning process with an outstanding performance of the learners. NCF (2005) accentuates saying that the learner must construct knowledge with help of the teacher as a facilitator. It is necessary to use an equitable and effective learning strategy. When the learning method is ameliorated the quality of education is also progressed. Concept mapping is an effective learning strategy that provides learners with a better learning experience. As emphasized by NEP–2020 the significant purpose of the pedagogical change is to proceed in advance from rote memorization to meaningful learning which facilitates for holistic development of the learner.

James (2006), Indrajit and Sahoo (2019), Novak & Gowin (1984), Whitley (2013) reveals that concept mapping promotes meaningful learning rather than rote learning. (Novak,1995) Concept mapping encourages creative thinking and the discovery of innovative problem-solving strategies. It is the most effective assessment tool for motivating pupils to employ meaningful learning patterns. Students use concept mapping to create a resilient framework for autodidactic learning. Concept mapping analyses the learning quality of an individual in order to improve deep learning and also for slow learners. It leads to significant improvements in conceptual comprehension and learning attainment. It allows individuals to identify the structured relationship between concepts by encouraging them to reflect on learning at a higher level.

Concept mapping develops higher-order thinking and reasoning abilities. It aids self-directed learning by elucidating the links between the concepts. Concept maps play important role in curriculum development (Novak, 1984) and are also applied to assess the student thinking domain, (Zimmerman, 2017). It improves performance assistance since it demonstrates how students think about and use what they have represented. Opera (2014) observed that concept mapping is effectively used in business designing, science learning, in teacher education programmes. A concept map is found to be useful in learning for eliciting prior knowledge, progressive differentiation, randomized thinking, sequential learning, design thinking, etc. The pattern of concepts into a well-defined hierarchy and integrative reconciliation, where inter-relationships can be demonstrated. Concept mapping holds for improving the quality of science learning and the use for assessing understanding.

Points of Concern

Although concept mapping is an effective strategy in the teaching-learning process there are constraints in using concept maps. (Bosch and Cabani, 2009; Wan and Hanewald, 2009)

- Improvements are to be made in the curriculum and schedule of the school to assist teachers in preparing concept maps to teach effectively.
- In-service teachers and teacher educators must necessarily undertake professional advancement

to attain skills and understanding to teach concept mapping to the learners.

- Pre-service teachers must be promulgated with theoretical and practical knowledge to use this strategy effectively.
- Concept mapping improves the caliber of learning performance when used systematically with continuous assessment and feedback.
- Rather than being passive listeners to complete the syllabus within the stipulated duration, the teacher must motivate the students to have a clear conceptual understanding. This can be enabled only by meaningful learning than rote learning by effective instructional strategy concept mapping.

References

1. Alkahtani, K. (2013). Developing Concrete Research Proposals and Facilitating Self-Directed Learning via Concept Mapping. *Creative Education*. (04). 110-116. DOI: 10.4236/ce.2013.42016.
2. Anderson, W, et al. (2000). A Taxonomy for Learning, Teaching, and Assessing: A Revision of Blooms Taxonomy of Educational Objectives.
3. Anderson, T. H., & Huang, S-C.C. (1989). On using concept maps to assess the comprehension effects of reading expository text.
4. Ausubel, D. P. (1968). Educational psychology: A cognitive view. New York: Holt, Rinehart, and Winston.
5. Barab, A. S., Hay, E. K., & Hickey, T. D. (2006) 7th International Conference of the Learning Science (1)
6. Cabani, M. K., & Bosch, J. J.(2009). Using concept mapping to improve the quality of learning. *Handbook of Research on Collaborative Learning Using Concept Mapping*. (1)316-336. 10.4018/978-1-59904-992-2.ch016.200
7. David, B (2007), Using Concept maps to measure deep, surface, and non-learning outcomes. *Studies in Higher Education*, 32(1), 39-57.DOI: 10.1080/03075070601099432.
8. Dochy, J. R. C., and Alexander. (1995) Mapping Prior Knowledge: A Framework for Discussion among Researchers. *European Journal of Psychology of Education*, 10(3)1995, 225–242.
9. Ghani, IBM. and Ibrahim, N.H., (2017) Enhancing students HOTS in laboratory educational activity by using concept map as an alternative assessment tool. *Chemistry Education Research and Practice*, 18(4), 849-874.DOI: <https://doi.org/10.1039/C7RP00120G>.
10. Hilbert, T.S., & Renkel, A. (2008). Concept mapping as a follow- up strategy to learning from text: what

- characterizes good and poor mappers? *Instructional Science*, 36(1), 53–73. doi: 10.1007/s11251-007-09022-9
11. Indrajit and Sahoo, (2019). Effect of Concept Mapping Strategy on Students' Cognitive Processes and Academic Achievement in Life Science.
 12. James, D. (2006) To what extent can concept mapping motivate students to take a more A meaningfull approach to learning Biology? *The Science Education Review*, 5(4).
 13. Jaakkola, T. & Veermans, K (2014). Effects of abstract and concrete simulation elements on science learning, *Journal of Computer-assisted Learning*, 31 (4), DOI:10.1111/jcal.12089.
 14. Jonassen, D. H. (2007). A Taxonomy of Meaningful Learning. *Educational Technology*, 47(5), 30 – 35.
 15. Joseph, K., & Charlene. (2008). Teaching Science in Elementary and Middle School. A Project-Based Approach. 3rd ed.
 16. Karpicke, J. D. (2012). Retrieval-Based Learning: Active Retrieval Promotes Meaningful Learning. *Current Directions in Psychological Science*, 21(3), 157–163.
 17. Karpicke, J. D., & Grimaldi, P. J. (2012). Retrieval-Based Learning: A Perspective for Enhancing Meaningful Learning. *Educational Psychology Review*, 24(3), 401–418.
 18. Karpicke, J. D., & Blunt, J. R. (2011). Retrieval Practice Produces More Learning than Elaborative Studying with Concept Mapping. *American Association for Advancement of Science*, 331(6018), 772–775.
 19. Kinchin, I.M., Mollits, A., and Reiska, P. (2019). Uncovering Types of Knowledge in Concept Maps. *Education Sciences*.
 20. Manjuma, B.(2019) A concept map for teaching and learning logic and methods of proof enhancing students' abilities in constructing Mathematical proofs. *Merit Research Journals*, 79 (90, 101-108.doi:10.5281/zenodo.3468495.
 21. Martínez, G., Pérez, Á. L., Suero, M. I., & Pardo, P. J. (2013). The Effectiveness of Concept Maps in Teaching Physics Concepts Applied to Engineering Education: Experimental Comparison of the Amount of Learning Achieved With and Without Concept Maps. *Journal of Science Education and Technology*, 22(2), 204–214.
 22. Mayer, R. E. (2002). Rote versus Meaningful Learning. *Theory into Practice*, 41(4), 226–232.
 23. Nath, Indrajit & Sahoo. (2019). Effect of Concept Mapping Strategy on Students' Cognitive Processes and Academic Achievement in Life Science. *International journal of multidisciplinary*, 04(8)
 24. Ng,W. & Hanewald, R.. (2009). Concept maps as a tool for promoting online collaborative learning in virtual teams with pre-service teachers. *Handbook of Research on Collaborative Learning Using Concept Mapping*.(1)81-99. 10.4018/978-1-59904-992-2.ch005.
 25. Novak, J.D. (2002). Meaningful learning: The essential factor for conceptual change in Limited or Inappropriate Propositional Hierarchies leading to empowerment of Learners. *Wiley Periodicals. Science Education* 86(1), 548-571.doi: 10.1002/sce.10032
 26. Novak, J.D. & Musando, (1991). A Twelve-Year Longitudinal Study of Science Concept Learning *American Educational Research Journal Spring*, 28(1), 117-153.
 27. Novak, J. D. (1995). Concept maps to facilitate teaching and learning Prospects.
 28. Novak, J.D. & Canas, A.J. (2007). Theoretical origins of concept maps, how to construct them, and uses in education. *Reflecting Education*. 3 (1), 29-42
 29. Novak, J.D. (1990). Concept maps and Vee diagrams: Two metacognitive tools to facilitate meaningful learning. *Instructional Science*, 19, 29-52.
 30. Novak, J.D., & Gowin, D.R. (1984). Learning how to learn. New York: Cambridge University Press
 31. O'Donnell, A. M., & Dansereau, D. F. (2000). Interactive Effects of Prior Knowledge and Material Format on Cooperative Teaching. *The Journal of Experimental Education*, 68(2), 101–118.
 32. Oprea, (2014). New perspective about teacher training: Conceptual maps used for interactive learning.
 33. Perna, J & Aksela, M. (2008). Concept maps as meaningful learning tools in a web-based chemistry material. *Proc. of the Third Int. Conference on Concept Mapping*.
 34. Romero, C., Cazorla, M., & Buzon, O. (2017). Meaningful learning using concept maps as a learning strategy. *Journal of Technology and Science Education*, 7(3), 313-332. <http://dx.doi.org/10.3926/jotse.276>
 35. Schulte, P.L (1996). A definition of constructivism, *Science Scope*, 18, 45-99.
 36. Schroeder, N. L., Nesbit, J. C., Anguiano, C. J., & Adesope, O. O. (2018). Studying and Constructing Concept Maps: A Meta-Analysis. *Educational Psychology Review*, 30(2), 431–455.
 37. Susan, & Turner (2007). A review of studies on Collaborative Concept mapping: What we have learned about the technique and what is next. *Journal of Interactive Learning Research*, 18 (4), 479 – 492.
 38. Torres, L. P., & Marriot, R. (2009). A Collaborative Learning Approach Using Concept Maps. *Handbook of Research* 10.4018/978-1-59904-992-2.ch001.
 39. Whitley, C. T. (2013). A Picture Is Worth a Thousand Words: Applying Image-based Learning to Course Design. *Teaching Sociology*, 41(2), 188–198. <https://doi:10.1177/0092055X12472>. □

Let's Embrace Each Challenge as an Opportunity for Self-transformation

Ram Nath Kovind, Hon'ble President of India delivered the Convocation Address at the 16th Convocation Ceremony of Mizoram University, Aizawl on May 05, 2022. He said, "Educational institutions are the incubators of the future. They not only provide training and education to students but mould them into good citizens. It is the unrelenting support of the teachers at the educational institutions and universities that plays the most prominent role in the lives of the students." Excerpts

It is a pleasure for me to be among all of you today. I would like to congratulate all the students who have received degrees today as well as your parents and teachers. It is with the collective effort of all that you have reached this milestone today.

This convocation was planned earlier this year but due to unavoidable circumstances, I had to postpone my visit. Hence, I feel happy that I have been able to complete something which was left incomplete till now.

I feel very happy to be in this beautiful state of Mizoram. The beauty and serenity of this state has always been an attraction for people. The setting of this University in these beautiful surroundings would add to the environment so conducive for studies. The campus of Mizoram University reminds me of the educational institutions of the ancient times which were close to the nature providing an appropriate learning ambience to the students.

My dear friends, Educational institutions are the incubators of the future. They not only provide training and education to students but mould them into good citizens. It is the unrelenting support of the teachers at the educational institutions and universities that plays the most prominent role in the lives of the students.

The natural beauty of the state is matched by human excellence shown by the people of Mizoram. With the second highest literacy levels in the country, Mizoram is a truly modern state ready to take off for higher achievements.

Today is a great day for not just the students but also the teachers who have worked hard on each one of you. I take this opportunity to congratulate 7832 students who have been awarded degrees today. I am told that out of these students, about 4700 are women students which is more than 50 percent. Also out of 38 gold medals awarded today, 23 of them have been won by girls. It is a shining example of women's excellence. I am glad that our daughters

have achieved success and are ready to shape their destinies through their own efforts.

I am happy to know that the faculty of Mizoram University is not only well qualified but also engaged in qualitative research work. Some of the faculty appointed here, have pursued impressive research work and have also applied for patents in their individual capacity. Good researchers are often exceptional teachers too. Their experimental learning is better imbibed by the students. Such faculty also encourages the spirit of research and innovation.

The National Education Policy seeks to encourage research based activities. I have been told that Mizoram University has established bio-incubator for nurturing entrepreneurs. The entrepreneurship development activities and establishment of "Technology Incubation Centers" in the University extending support to the budding entrepreneurs to nurture their ideas with innovation and creativity is a step in the right direction. Such initiatives also establish a system of knowledge transfer and wealth creation.

I appreciate these initiatives of the university to promote innovation and transform it into enterprise. This is the key to bring about change in our society and economy. I will not be surprised if ideas germinating in the bright minds of young students of Mizoram may bring a revolution in the field of science and technology. I congratulate the department of Science and Technology, Government of India for initiating such collaborations with University of Mizoram.

Besides nurturing research and innovation, what is important is skill development that helps in employability. Introduction of courses on handloom weaving and bee-keeping as a part of Bachelors in Vocation can be emulated by many other Institutes and Universities. Students who either have a background of such vocations or are eager to pursue them as a profession can take up such courses and gain expertise through such vocational courses. These courses impart skills and at the same time endeavour to safeguard the traditional knowledge of our country which

gives us our unique and rich heritage. In the year 1937, Mahatma Gandhi had recommended a system of value education to be imparted to all the students in the country. The National Education Policy, with its specific focus on preserving traditional Indian values along with modern learning, tries to incorporate the Gandhian values. Being a value based person makes anyone a better professional in whatever area he chooses.

Mizoram is blessed with natural resources in abundance. The wide variety of flora and fauna gives us opportunities for immense range of studies. A region which is rich in bio-diversity also offers us vast opportunities for research and development. I see great opportunities for the youth in the areas of floriculture and bamboo based enterprises. The eco-system for start-ups was never as inspiring as it is today. I am sure the young students must be reading about unicorns making waves in the country and attracting investments. I can see the tendency of becoming job creators gaining ground among the young population.

However, it is our responsibility to strike the right balance between development and sustainability. The environment in this state as well as the other north-eastern states needs to be preserved with care. We must adopt practices which are beneficial not only to us but also to the nature. I must compliment the people of Mizoram along with the people of Sikkim and Tripura for generating the least plastic waste as per a study by NITI Aayog. This is a good example of responsible consumption and production which our young students will further strengthen. I have been told that despite busy traffic, the dutiful people of Aizawl refrain from honking. This practice is worth appreciating and may be adopted by people in other cities too.

Ladies and Gentlemen, The north-eastern region of our country popularly has immense potential for trade and development. Mizoram being a land-locked state does not have access to sea but shares its borders with both Bangladesh and Myanmar besides the Indian states of Assam, Tripura and Manipur. The agreement for development of international trade 'haats' at borders with Bangladesh which was recently signed by the two countries is a step which would lead to better connectivity and trade.

Of even greater importance is the Kaladan Multi Modal Transit Transport Project which seeks to create facilities for shipment of cargo from the eastern ports of India to Myanmar as well as to the North-Eastern part of India through Myanmar. It will connect Sittwe Port in Myanmar to the India-

Myanmar border thereby contributing to the economic development of the North-Eastern States of India. I hope more of such projects are identified and encouraged for holistic development of the North-Eastern States and our neighbouring countries.

Ladies and Gentlemen, I have always emphasized on promoting Universities' Social Responsibility or USR just as the Corporate Social Responsibility or CSR for the business enterprises. In my conferences with Governors, I have reiterated the need for adopting villages by the Universities and Institutes and encouraging the social and economic development of the neighbouring areas. But in case of Mizoram University, I was pleasantly surprised to know that it has already established Yunus Social Business Centre inspired by the ideals of Noble Laureate Mohammed Yunus who changed the lives of numerous people. He pulled them out of poverty by providing them micro-credit. I hope that this initiative of Mizoram University will also help the people of this state as well as other parts of the country in bringing a positive change in their lives. In the context of equitable development, I am happy to note that earlier this year the Governor has laid down foundation stone for projects under EWS schemes. I am sure that the projects under the scheme will provide quality education in an inclusive manner.

There is one more thing which I would like to talk about. You all know about the UN Sustainable Development Goals or SDGs which are a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity. In this context, 17 Goals have been identified which are to be adopted and achieved by all signatories by 2030. To enable India meet its global commitments, the State governments should also adopt SDGs as their priorities.

According to Progress on Goal - 4 which pertains to providing Quality Education, NITI Aayog's SDG India Index 2020-21 shows that Mizoram with a score of 60 performed better than the national average of 57. An interesting point that figured in the analysis was that the score for Goal - 4 ranked Aizwal as the top performer among all districts of the north-eastern states. I urge the people of Aizwal to handhold and encourage people in the other districts of the state to improve their social indices and participate in the process of national development.

Once again, I congratulate the students, teachers and organizers of this convocation and wish them very best in life.

Thank you, Jai Hind!

□

CAMPUS NEWS

NAAC Sponsored National Webinar on Digital Transformation in Higher Education

A two-day NAAC Sponsored National Webinar on 'Digital Transformation in Higher Education during COVID-19 Pandemic' was organized by the Yogoda Satsanga Palpara Mahavidyalaya, Palpara, Purba Medinipur, West Bengal. Mrs Srimoyee Roy, Assistant Professor, Department of English invited the delegates, invitees and participants for their participation in the event. Prof. Pradipta Kumar Mishra, Principal of the Institution extended a warm welcome to the dignitaries and participants of the Webinar. Dr Tusharkanti Mandal, Head, Department of Economics and Member, IQAC delivered the concept note on the theme of the Webinar. Prof. Madhumangal Pal, Director, IQAC of Vidyasagar University, Midnapore, West Bengal inaugurated the Webinar and released the Souvenir of the Webinar. In his inaugural address, he clarified the Digitalisation of Higher Education by focusing on the blended learning approach, development of teaching skills and competencies for the learners and teachers and promotion of independent study for every learner. Besides, he highlighted the facilities available for the use of unlimited learning resources, and multimedia access to education through the online channels introduced by the Ministry of Education, Govt. of India. He also emphasised the limitations of the Digitalisation of Higher Education in India such as the non-availability of internet connection, non-availability of technologies for socially and economically deprived students, the need for training and orientation for the teachers on the uses of technological aids and appliances, the cost-effectiveness of the digital devices, need of digital classrooms, e-learning as a cause of social isolation, etc. In his concluding remarks, he visualised the paradigm shift from Traditional Teaching-learning Process to Digital Teaching Learning Process. Dr Aniruddha Sinha Coordinator, IQAC and Organizing Secretary extended the vote of thanks in the Inaugural Session of the Webinar.

During Technical Session, Prof. Siba Prasad Adhikary, Former Vice Chancellor, Fakir Mohan University, Balasore, Odisha presented his deliberation on the 'Transformation in Higher Education through ICT & Skill: How to Achieve in India?' In his

presentation as a Keynote Speaker, he emphasised on the forces of change in the age of knowledge with a focus on ICT. He traced the Ancient Higher Education prevailed in Takhsila and Nalanda and how India proved as Swarna Prasu Bharatbarsha through the contribution of Indian Stalwarts like- Sir C V Raman, Sir Jagadish Chandra Bose, Srinivasa Ramanujan, Prof. Satendranath Bose, etc. in the field of Literature, Science and Humanities. He focused on the role of the Universities in core and periphery perspectives by making a comparison between India and European Countries with reference to Higher Education. To him, there is a significant role of ICT in Higher Education in bringing quality to the Indian Higher Education System. For this, stress should be given to Quality Higher Education along with its quality parameters, value-added and need-based Subjects like Polytechnic, Vocational Training, Language Skill Training, Computer Training, etc. He also highlighted on work culture, research culture and quality culture to be institutionalised through action research leading to quality research.

Prof Amiya Kumar Rath, Adviser (ICT), Eastern Region Coordinator, NAAC, Bengaluru delivered his talk on 'Assessment and Accreditation' as per the Revised Assessment Framework (RAF) which has been effective from July, 2017. In his presentation, he emphasised on Vision, Mission, and Value Framework of NAAC. He elaborated on the Assessment Procedure meant for the Universities, Autonomous Colleges, and Affiliated Colleges by focusing on the 7 Criteria, Key Indicators, both Quantitative and Qualitative Matrices and SSS data. In his presentation, he detailed the procedure of NAAC Assessment from the submission of AQARs, IQA, SSR, and SSS data with indicating Standard Operating Procedure (SOP) for each Matrice (both qualitative and quantitative). He stressed the quality parameters like Seed Money for Teachers, Workshop on Intellectual Property Rights, number of Ph D awarded under a Teacher as the Research Supervisor, Social Responsibility Activities through Community Collaboration, MOU with Various Organisations or Agencies for doing different activities, integration of Library Management System, Alumni Engagement through the formation of a registered Alumni Association in doing different activities for the Institution, Faculty Empowerment

Strategies, Yearly Performance Appraisal Report for both the Teaching and Non-teaching Staff, Internal and External Audits, Quality Audits, Human Values and Professional Ethics, etc.

Dr. Swapan Kumar Misra, Principal, Mugberia Gangadhar Mahavidyalaya, Mugberia, East Midnapore, West Bengal presented his lecture on 'Digitalisation of Higher Education in Rural Colleges: Problems and Prospects'. In his presentation, he shared his views on several problems that have been faced by the teachers and students of rural India, like poor internet connectivity, financial charges of internet connectivity that have to be borne by the poor students' families, online examination procedure, particularly malpractices done during examination process etc. He suggested some measures for the improvement of the present digital or e-learning process, especially emphasising the blended mode of the teaching-learning process.

Prof. Ashutosh Biswal, Department of Education (CASE), Faculty of Education and Psychology, The M S University of Baroda, Vadodara, Gujrat presented his talk on the Challenges of Digitalisation of Higher Education in India. He highlighted the need for trained faculty to manage the digitalisation of higher education, professional collaborations, different approaches to evaluation, the cost-effectiveness of higher education, data-based system, online learning, personalised learning and changing the vision of higher education in course of his discussion. 12 papers were presented by the Faculty Members, Research Scholars, and Students from different Colleges and Universities in the Indian States. The whole session was chaired by Prof. Sudarshan Mishra, Head, Department of Education, Ravenshaw University, Cuttack, Odisha and Mrs Srimoyee Roy was the Rapporteur of the session.

Prof. Gouranga Charan Nanda, Vice Chancellor, Netaji Subhas University, Jamshedpur, Jharkhand delivered a talk on 'Digital Initiatives in Higher Education during COVID-19'. In his presentation, he shared his experience with the online teaching-learning process. According to him, the Online Examination System has paved the way for malpractice and manipulation for which there was a demand from students for online examinations. To him, online teaching would be meaningful if there is digital infrastructure, trained teachers, the availability of technological aids for the students, and smart classrooms. The system has to shift to the online teaching model. Therefore,

we have to accept the Blended Learning Approach to tackle the situation always. He has also focused on the Holistic Education stated by the NEP-2020 for which along with the offline mode the online means like MOOCs, SWAYAM Platforms for CPD of Teachers, DIKHA Platform of NCERT need to be supplemented. For this, the teachers have to upgrade their skills and competencies in Higher Education. He also emphasised the NAAC Accreditation of the HEIs adhering to Quality Enhancement in Education. Therefore, the HEIs have to update their Official Websites with adopting the Best Practices through the mobilisation of unlimited learning resources available online. He concluded his speech by saying the very statement that teachers and ICT will have to be the two faces of the same coin for the Digitalisation of Higher Education in India. 11 papers were presented by the Faculty Members, Research Scholars, Students from different Colleges and Universities of different Indian States. The session was chaired by Prof. Anil Kumar Mahapatra, Head, Department of Political Science, F M University, Balasore, Odisha and Prof. P K Mishra, Principal, Y S Palpara Mahavidyalaya, Palpara, East Midnapore. Mr Suman Kr. Dhar, State Aided College Teacher in English was the rapporteur of the session.

Dr Rupa Dasgupta, Principal, Debra Thana Sahid Khudiram Smriti Mahavidyalaya, Debra, Paschim Medinipur, West Bengal in her talk on 'Digital Tools in Teaching-learning Process' discussed the Basic Goals of Digital Teaching-learning Process. In this connection, she has focused on four factors such as–Availability, Connectivity, Techniques and Feasibility. She has mentioned different apps and tools, such as communication part, especially social media apps. She emphasised on learning management system, and database management system and discussed how these are important in the teaching-learning process. Besides, she mentioned different teaching platforms like, google meet, zoom platform, Webex, Teachmint and also the problems related to the enrolment of a large number of students in google meet etc. According to her, the way out of this problem is the Teachmint App. Mentioned Resource sharing and Institutional Repository. Lastly, she highlighted the importance of Virtual Lab. Dr Jyoti Sankar Pradhan, Associate Professor and Head, Department of Education, Fakir Mohan University, Vyasa Vihar, Balasore, Odisha in his presentation on, 'Impact of COVID-19 on Higher Education in India' views that the academic atmosphere and the examination system have been severely affected during the said period. Around 32

crore students have been affected in India. However, the support services to the students for online learning like ZOOM, Google Meet Platform, WhatsApp, Instagram, etc. acted as the devices for the online learning. In order to accelerate this online learning, the other means introduced by UGC and NCERT such as SWAYAM Platform, MOOCs, Swayam Prabha, DIKSHA, e-P. G. Pathasala, e-Adhyan, e-Gyankosh, e-Books, e-Contents, Shodhganga, Gyandarshan, Web radio, Vidwan, e-source Sindhu, Virtual Lab, etc. subsequently. To him, this COVID-19 Pandemic has both positive and negative sides to human learning. Thus, the time has come to focus on self-learning habits to be accelerated and enhanced through the use of the multiple online learning resources in which the organisation of Webinars or e-Conferences have been instrumental.

The Valedictory Session was chaired by the Principal of the Institution, Prof. Pradipta Kumar Mishra who invited the Chief Guest to the online platform of the event. Dr Tusharkanti Mandal, Head, Department of Economics and Member, IQAC presented the Webinar Report covering all the activities done during the two days event. Prof. Pradipta Kumar Mishra welcomed Prof. Aditya Prasad Padhi, Former Vice Chancellor, Berhampur University, Bhanja Vihar, Odisha and Member, Executive Committee, NAAC, Bengaluru as the Chief Guest of the session and highlighted his significant contribution to qualitative enhancement in higher education of India. In his address, he stated, "Change is the law of life". His advice was "Do not look at the past and present only rather focus on the future." With reference to the Digital Transformation of Higher Education in India, he highlighted the digital strategies for which emphasis should be given to the Vision and Mission of each Higher Education Institution (HEI) which is a long journey. For this, there is a need to change the organisational structure and organisational climate of the Institution as a continuous process for development. To him, profound changes have been evinced in the Teaching Methodologies adhering to the adoption of 60% Online and 40% offline learning approaches as per the UGC Circular. There is an urgency for a Changed Management Strategy, interaction with the stakeholders, and use of Appropriate Technology for need-based and quality higher education, he observed. To him, Human Centric Design or Strategy is essential to identify the human desires for development with a focus on Health and Education as the two fundamental sectors of Development for all times to come, he concluded.

Participants extended their valuable comments on the organisation of this Two-day National Webinar. Dr Aniruddha Sinha proposed the vote of thanks. In his speech, he extended his thankfulness to the Principal of the Institution for facilitating the IQAC and his profound gratitude to Swami Achyutananda, President and Mr Sital Chandra De, Secretary and DDO of the Governing Body along with its other Members. In addition to this, he extended his thankfulness to Dr Tusharkanti Mandal, Dr Mrinal Kanti Dey, Dr Arindam Pal, as the IQAC members, Dr Sheikh Manirul Islam, Bursar, Mr Suman Mondal, Technological Adviser of the Webinar, Miss Srimoyee Roy, Mr Sudipta Das, Mr Arindam Das and Mr Suman Kumar Dhar, the faculty of the Institution, Mr Gour Krishna Das Adhikary, Head Clerk(I/C) along with other members of the Teaching and Non-Teaching Staff of the Institution for their significant contribution in completion of the Webinar. Altogether, 197 participants from the States-Odisha, Jharkhand, Bihar, Punjab, Rajasthan, Tamil Nadu, Meghalaya, Nagaland and West Bengal participated in this online national academic event.

Academic Journey of Teaching Learning Centre of Shri Lal Bahadur Shastri National Sanskrit University, New Delhi

The Teaching-Learning Centre (TLC) of Shri Lal Bahadur Shastri National Sanskrit University (SLBSNS) (Central University), New Delhi was established under the scheme of Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching, Ministry of Education, Govt. of India in the year 2017. The vision of the Centre is to develop skills and competencies of teachers and teacher educators associated with language education especially Sanskrit for designing, developing, implementing and evaluating teaching-learning systems.

The Centre completed its remarkable academic journey through well planned and a well-executed total of 13 programmes out of which 09 programmes were at the national level and the remaining 04 at the university level. All the programmes were conducted under the patronship of Vice Chancellor of SLBSNS University and convened & coordinated by the Director of the Centre. Keeping in view of the COVID-19 pandemic all the programmes were conducted online through the Google Meet platform. The broad themes covered for 2021-22 period included NEP-2020, digital tools, digital skills, professional skills and Open Educational Resources (OERs). The Centre designed, planned, implemented and executed

various programmes on mentioned themes in the form of workshops, webinars, and Faculty Development Programmes from which 2950 participants across the country benefitted.

The participants who benefitted from the 09 programmes organised at the national level were around 2636. The brief details of these programmes with their topic, duration, and participant number are: the first national workshop was of 03 days on 'Video Development and Editing' from May 19-21, 2021 in which 90 participants from 18 states and 02 UTs; the second national workshop of 05 days was on 'Development and Application of Open Educational Resources (OERs)' from June 14-18, 2021 from which 49 participants from 12 states and 1 UT benefitted; the third programme was online National Webinar on 'Implementation of NEP-2020: In the Context of Sanskrit Education' dated June 30, 2021 in which 1072 participants from 25 states and 4 UTs participated; the fourth programme was 05 days online National Workshop on 'Use and Application of Google Tools' from 9th to 13th August, 2021 in which 66 participants were from 13 states and 2 UTs. The fifth programme was also a 05-day online National Workshop on 'Enhancing Digital Research Competencies' from 13th to 17th September, 2021 in which 75 participants were from 12 states and 1 UTs. The sixth programme was a three-day online National Workshop on 'Designing and Development of e-Course' from 16th to 18th November, 2021 in which 42 participants were from 12 states and 2 UTs. The seventh programme was a ten-day online National Workshop on 'Professional Skill Development of Teachers' from 14th to 23rd December, 2021 in which 45 participants were from 10 states and 2 UTs. The eighth programme was online National Webinar on 'Implementation of NEP-2020: In the Context of Higher Education' dated 11th February, 2022 in which 1158 participants from 26 states and 5 UTs participated. The ninth programme was a five-day online National Workshop on Using and Managing Online Teaching and Assessment from 7th to 11th March, 2022 in which 39 participants were from 13 states and 2 UTs. The remaining 04 programmes organised at the university level were 03 for students and 01 for non-teaching staff through which 314 participants benefitted.

Each workshop was transacted through distinctly designed sessions having demonstration-based technical sessions with day-wise combined Question & Answer sessions and self-practice sessions. All the technical sessions were conducted under the

expert guidance of Resource Persons associated with various prestigious institutions in our country. In all the programmes, choice-based assignments on the theme taken up in the technical sessions were given to the participants to ensure and facilitate their learning. In addition to this, an online test based on the topics covered in the technical sessions was also administered to the participants for assessing their acquired knowledge and skills from the programme. The sharing of experience session was taken up at the end of every programme. In general, the participants acknowledged the up-gradation of their knowledge, understanding and skills through respective organised programmes and appreciated the efforts of the Centre in executing the programmes in a systematic and excellent way. The experience in one or two words shared through the Mentimeter App in the form of a word cloud was also marked 'Excellent' by the participants in all the programmes.

The feedback about the programme was taken on various points through Google form in five categories and the average percentage of national-level programmes found in these categories were 78% in Excellent, 19% in Very Good, 02% in Good, 00% in Satisfactory and 00% in Unsatisfactory. After the completion of the programme, the participants were given graded e-Certificates as per the criteria viz. attendance, online test performance, feedback and assignment submission along with an e-Album.

International Conference on Law and Economics

A two-day International Conference on 'Law and Economics' is being organized by the National Law University Delhi in association with the Indian Association of Law and Economics during November 12-13, 2022.

The field of economic analysis of law has arguably emerged as one of the influential theories of jurisprudence. The interdisciplinary subject provides relevant and deeper insights into several contemporary legal issues in India. Laws are instruments for achieving important social goals. Economic analysis often takes for granted such legal institutions as property, contracts, torts, and administrative which affect the economy. The positive and normative economic analysis will be used to design incentive structure law and policy. Economics renders a practical way of assessing the effectiveness of laws and policy which further assists the state in achieving the objective of economic growth and development.

Hence, it is essential to acknowledge the related law and economics shared in the new world order. Keeping in view of techno-economic and legal challenges, especially offline and online markets and non-market interactions in cyber critical technologies, sustainable development, safety and security, there is a need for the generation and dissemination of knowledge. The topics of the event are:

Law and Economics

- Public Policy.
- Behavioural Law and Economics.
- Welfare Economics.
- Economic Analysis of Law.
- Decision Making in Reference to Risk and Insurance under 'Uncertainty'.

Consumer Law and Economics

- Data Protection and Consumer Law.
- Mandatory Disclosure and Consumer Law.
- Transparency and Consumer Law Related to Mortgage Loans.

Intellectual Property Law and Economics

- The Philosophical Foundations of Intellectual Property Laws and Paradigm of Law and Economics.
- The Proprietary Model of Intellectual Property and Economics.

Corporate Law and Economics

- Implications of Economic Changes on Issue of Capital Such as IPOS and FPOS.
- Economic Analysis Vis a Vis Enactment of the Insolvency and Bankruptcy Code.
- Analysis of the Impact of Corporate Governance Reforms on Economic Growth.
- Financial Market Regulation and Economics.

Competition Law and Economics

- Influence of Law and Economics on Regulations and Antitrust Law.
- Application of Economic Tools to Competition Law Analysis.
- Horizontal/Vertical Agreements and Economic Analysis.
- Abuse of Dominance and its Economic Analysis.
- Mergers and Acquisitions and Applicability of Economics.

Property Law and Economics

- An Economic Theory of Property.
- Transaction Costs and Property: An Economic Survey.
- Protecting Property Rights, Claiming Damages and Injunctions.
- What Can We Own Privately? The interface of Property Law and Economics.

Tort Law and Economics

- Approaching Contributory and Comparative Negligence in Law and Economics.
- Economics of Joint and Several Liability.
- Tort Damages, Punitive Damages and Non-pecuniary Losses.
- Tort Law and Liability Insurance.

Criminal Law and Economics

- Economics and Increase in Crime Rate.
- Economics and Adjudication under Criminal Law.
- An Economic theory of Crime and Punishment.
- Applying Rational Crime Model to Public Policy.

Contract Law and Economics

- Bargain Theory and Contracts.
- Contractual Mistake, Misrepresentation and Economics.
- Gratuitous Promises.
- Foreseeability of Damages.

Economics and Regulations

- Economic Analysis: Effectiveness of Regulations.
- Role of Regulators.
- Regulatory Compliance and Cost-Benefit Analysis.
- Regulatory Governance and its Tools.

Poverty and Economics

- Information Economics and Private Ownership.
- Patents and Poverty: The Role of Economics.
- Migrants, Property and Poverty.

Labour Law and Economics

- Labour's Labour and Employers' Choice to Employ and Economic Principles.
- Economic Implications of Labour Related Laws on Business.

- Labour, Employment and Law at Workplace.

Gender and Economics

- Gender Inequalities and Related Economic Implications.
- Gender Equality and Economic Growth.
- Impediments and Challenges in Current Times.

Technology, Data, Artificial Intelligence and Economics

- Big Data and Economic Policy.
- Artificial Intelligence and Economic Growth-Benefits and Challenges.
- AI's Impact on Market Participants and Ancillary Issues.

Constitution and Economics

- Question of 'Inclusion' and Equity in Economic Development.
- Social Justice and Fair Globalization.
- Freedom of Trade and Human Rights.
- New Frontier in Federalism: Fiscal Policies and Tax Structures.

For further details, contact Organising Secretary, National Law University, Sector 14, Dwarka, New Delhi –110078, Delhi. E-mail: icle2022@nludelhi.ac.in. For updates, log on to: www.nludelhi.ac.in.

International Conference on Industrial Engineering and Operations Management

A three-day International Conference on 'Industrial Engineering and Operations Management' is being organized by the IEOM Society International during August 16-18, 2022 through hybrid mode. Hosts are the National Institute of Technology, Warangal and Jawaharlal Nehru Technological University, Hyderabad at NIT, Warangal. The event aims to provide a forum for academics, researchers and practitioners to exchange ideas and recent developments in the field of Industrial Engineering and Operations Management. The conference is also expected to foster networking, collaboration and joint effort among the conference participants to advance the theory and practice as well as to identify major trends in Industrial Engineering and Operations Management. The Topics covering industrial issues/ applications and academic research include, but are not limited to:

Industrial Engineering and Operations Management

- Engineering Management.
- Inventory Management.
- Lean.
- Production Engineering.
- Supply Chain/Supply Chain Sustainability/Green Supply Chain.
- Operations Research.
- Product Lifecycle Management (PLM).
- Six Sigma.
- Sustainable Manufacturing.
- Healthcare Operations and Services.
- Technology Management.
- Environmental Systems Engineering.
- Production Planning and Management.
- Quality.
- Reliability.
- Project Management.
- Statistical Process Monitoring.
- Logistics.
- Construction Management.
- Computer Integrated Manufacturing
- Automation and Agility
- Cellular Manufacturing.
- Modelling and Simulation.
- Sensors and Sensing.
- Transportation and Traffic.
- Automotive Manufacturing Systems.
- Mechatronics and IIoT.
- Industry 4.0.
- Robotics.
- Systems Engineering.
- CAD, Applications and Computing.
- Systems Dynamics.
- Manufacturing Science.

Business Management

- Human Factors and Ergonomics.
- Information Systems and Management.
- Financial Engineering.
- Statistics.

- Industrial Services.
- Innovation.

Artificial Intelligence

- Cyber Security.
- Data Analytics/Business Analytics.
- Decision Sciences.
- Energy
- Renewable Energy Sources.
- Oil and Gas.
- Fuel Cells.
- Electric Vehicles.
- Heat Transfer Analysis of Energy Systems.
- Defense and Aviation.
- Automobile Engineering.
- IC Engines and Alternate Fuels.
- Manufacturing
- Additive Manufacturing.

- Subtractive.
- Nontraditional Manufacturing Process.
- Advanced Materials Process.
- Composite Materials.
- Special Tracks
- Global Engineering Education (GEE).
- Global Business Management Education.
- Industry 4.0.
- Industry Solutions.
- Diversity and Inclusion Panel Sponsored by Ford Motor Company.
- Women in Industry and Academia (WIIA).

For further details, contact Conference Chair, Dr V Vasu, Associate Professor, Department of Mechanical Engineering, National Institute of Technology, Warangal-506004 (Telangana), Mobile: 8019789214, E-mail: vasu@nitw.ac.in, vasuapplepc@gmail.com. For updates, log on to: www.jntuh.ac.in □

AIU NEWS

Prof Suranjan Das: The New President AIU (2022-23)

Prof Suranjan Das, Vice Chancellor, Jadavpur University, Jadavpur has taken over as the New President of the Association of Indian Universities (AIU) on July 1st, 2022. An eminent and highly acclaimed Professor of History, Prof Das is the 101st President of the AIU.

He is also the Honorary Professor at the University of Exeter, UK. Earlier, Prof. Das served as a Professor of History at the University of Calcutta and served that institution both as Pro Vice Chancellor (Academic) and Vice Chancellor. He was also Honorary Director, Netaji Institute for Asian Studies, Kolkata.

An achiever of D.Phil. degree from the University of Oxford, Prof Das won acclaim as a specialist in South Asian History and Politics, especially in the realms of identity politics, nation-building, and Indian Foreign Policy. He was President of the Modern India section of the Indian History Congress (2003) and the General President of the Punjab History Congress (2014). He has held visiting assignments in institutions of higher learning in Europe, the USA, and Australia. He has been a member of academic and semi-academic delegations to countries of Asia, West Asia, Latin America, Europe, and Australia. He remains associated with policy formulation bodies for higher education in India. He has authored five major monographs, co-authored three volumes, co-edited five books, and published 28 articles in refereed journals/edited volumes. An acclaimed scholar, Professor Das is a recipient of national and international awards and honours.

In the session 2021-22, he was the Vice President of AIU and has now joined as President with a solid understanding of the activities and functioning of AIU. He brings with him a lot of hope and enthusiasm for AIU Fraternity.

The Association of Indian Universities welcomes him as its new President and is looking forward to gaining from his academic acumen, scholarship, and vast experience.

□

Book Review

Need to be Taken Seriously

Srinivas K Saidapur*

Saidapur, Srinivas K (2022). *Remodeling the Universities: Meeting Challenges of the 21st Century*, New Delhi: Atlantic Publishers, Hard Bound, Pages 189, Rs. 795/-

The book *Remodeling the Universities: Meeting Challenges of the 21st Century* is not just another simple addition to the publications on higher education but it is the essence of the author's long years of experience and contribution to the field of higher education. The Author, Srinivas K. Saidapur is a well-known Scientist, Thinker, and Educational Administrator, having served Karnatak University, Dharwad, as a Professor of Zoology and Vice Chancellor. He is the recipient of many prestigious awards including the 'Shanti Swarup Bhatnagar Prize given by the Hon'ble Prime Minister of India.

The book begins with a run-up on the historical sketch of Indian universities, (Chapter 1) with an apt quote from Jawaharlal Nehru where, who said: "A university stands for humanism, for tolerance, for reason, for the adventure of ideas and for the search for the truth...if the universities discharge their duties adequately, then it is well with the nation and the people" (P.1, emphasis added). Sage words from Nehru are very relevant to the times we live in. Saidapur dwells on the *Gurukul* system in ancient India, advances in the field of education in places like Nalanda and Takshashila, and the universal contributions of Kautilya's Arthashastra, the Ayurvedic systems of medicine, to recall only a few, before the introduction of English by Lord Macaulay. Saidapur rightly avers the selfish and cultural motives with which English education was introduced, ie, to serve the English masters as clerks and assimilate their cultural ethos and values. But, many of the recipients of English education could also enter the ICS as administrators, something the colonial masters could not prevent.

* Former Vice Chancellor, Karnataka University, Dharwad, Res: Trigunatmika Apartments TF-1, Bharati Nagar, Haliyal Road Near Dasankoppa Circle, Saptapur, Dharwad-580001 (Karnataka). E-mail: saidapur@gmail.com

At a more serious level, the author refers to the educational reforms recommended by Dr. S. Radhakrishnan, whose ideas influenced the subsequent Educational Commissions headed by Dr. D S. Kothari, Dr. Yashpal, and lately Dr. Kasturirangan who chaired the Committee to draft NEP-2020. Saidapur affirms that the Radhakrishnan and Kothari Commission reports should have been implemented fully and introspected periodically (P.9) to give a sense of direction to higher education in India.

Saidapur raises very pertinent questions like what are the basic objectives of a university and points out that thinkers like Sri. Aurobindo, Vivekananda, and Rabindranath Tagore expounded their views which were also reflected by Nehru and Nelson Mandela in South Africa, who said 'collapse of education is the collapse of a nation'. (P.12) The Introductory Chapter is rightly summed up by cautioning the higher educational institutions (HEIs) that it is high time to study and analyse the rise and fall of universities in India and grapple with the complex problems arising out of globalisation and the changing demographic picture of the country (P. 20).

In the author's scheme of things 'Leadership and Governance' play a key role in the functioning of universities- the subject matter of chapter 2. He takes a broader view that the process of management of societies and nations depends on the quality of human resources and that universities bear the sole responsibility for producing the right resource. By delivering quality education in diverse fields ranging from science and technology to legal education and foreign affairs, to the inculcation of moral and ethical values, universities play a cardinal role. To perform this gigantic task, universities must have the appropriate leaders as Vice Chancellors supported by Registrars in charge of academic evaluation

and supporting structures like the Governing / Executive Council/ Syndicate, Academic Council, and other related agencies/ institutions. The author lays stress on the appointment of visionaries as Vice Chancellors. He bemoans the sorry state of affairs by frankly stating that many sitting vice Chancellors of state universities are subservient to the prevailing governments and Chancellors (P.28) and that many of them are being appointed as Chairpersons of Search Committees to recommend the panel of names for the appointment of their counterparts. He disapproves of the system of inviting applications, and the role of lobbying in appointments of Vice Chancellors and recommends governments inviting worthy persons to such positions. Saidapur also calls for evolving proper guidelines for Search Committees. In any case, under the NEP, the appointment of Vice Chancellors is going to be hopefully taken away from the hands of governments and vested with a body/ Council consisting of eminent academicians. His suggestion for the position of Pro- Vice-Chancellors/ Rectors is well taken, but that calls for amending the Acts passed by State Governments.

Saidapur's suggestions regarding the constitution of Boards of Studies, recruitment of faculty, and his plea for digital libraries with appropriate physical and digital infrastructure are worthy of implementation. I cannot agree with him more when he recalls the names of Sir. Ashutosh Mukherjee, Madan Mohan Malavia, Dr. Radhakrishnan provided illustrious leadership to the universities they headed. Can and will Indian universities return to such golden age? Saidapur provides numerous ideas on streamlining administration through delegation of powers and evolving user-friendly guidelines for the operation of grants and so on.

Management of financial resources is discussed in chapter 3. Saidapur laments the financial crunch faced by State and Central Universities and runs through the sources of universities' revenue. Reference is made to the funding received under the RUSA scheme. The creation of a corpus fund idea is good. His suggestion for universities to establish linkages with industries is to be pursued vigorously. But, industries too have their own demands and make their own appraisals before committing funds. Universities should also tap their prominent alumnie--internally and abroad--for funds for augmenting infrastructural facilities and creation of chairs etc.

Regarding 'Curriculum Preparation', the author lays emphasis on contextualising the contents and delivery. (Chapter 4). In the context of the NEP, his stress on the creation of Schools across Disciplines ranging from hard Sciences to Humanities and Social Sciences as well as providing flexibility of choices to students is appropriate. Involvement of experts in joint Boards of Studies, if necessary, and industry representatives in the drafting of the curriculum in various disciplines will be of great utility. The suggestion for creating faculty positions to sustain new and existing courses, redesigning classrooms, and preparation of textbooks and manuals are praiseworthy. But the sad reality is that more than 50 percent of faculty positions in State and Central universities are vacant and governments are not sanctioning universities to fill up positions, forcing them to rely on guest faculty who lack commitment. Equally crucial is the author's call for the promotion of germane research (chapter 5). In addition to the creation of Adjunct and Visiting Professors and the promotion of linkages and collaborations, the author's emphasis on the practice of professional ethics is to be lauded. The author could have made a brief reference to the fact that Indian academicians are often found lagging behind in global publications and surveys, both in terms of quantity and quality.

Management of Constituent and Affiliated Colleges is reflected upon in Chapter 6. The author suggests that the Constituent Colleges run by the universities must transform themselves into model colleges from which the other colleges in the region can learn. His ideas are note-worthy. Under the NEP 2020, the system of affiliation is likely to be phased out in the coming fifteen years or so. But, several states are yet to accept and implement the NEP-2020. In any case, the affiliation system is likely to prevail for quite some time. Nevertheless, as the author hopes, the Constituent Colleges must strive to provide leadership to other institutions in the region.

Saidapur's concern for quality drives him to make a strong plea for 'Repurposing the Centres of Human Resource Development, (HRDCs) in Chapter 7. He is right in saying that HRDCs have a key role in implementing the NEP-2020 (P.104 plus). Recharge programs for senior faculty are also necessary for the opinion of this reviewer, in addition to reformatting the 'Orientation Programmes' and 'Refresher Courses' for junior and middle-level faculty.

The role of State Higher Education Councils (SHECs) and Assessment and Accreditation of Universities are dealt with in great detail in Chapters 8 & 9 respectively. Given his long years of experience as a Professor and Vice-Chancellor, the author strongly pleads for SHECs to play a role in empowering HEIs to improve their governance, and academic programmes and in ushering in various academic reforms. His suggestion for annual reviews of SHECs by experts drawn from an all-India panel (P.125) is significant. As regards assessment and accreditation, the author calls for new paradigms of assessment of HEIs in view of the changing global scenario. It is gratifying to note that NAAC has recently brought out a draft white paper in this regard, eliciting stakeholders' responses. The author's suggestions are worthy of being incorporated.

In the concluding Chapter 10, the author underlines the need for universities striving to bridge the urban-rural divide prevalent in our higher

education institutions. He makes a strong plea for academic freedom and commitment of faculty in an environment free-from political interference. He also lays stress on making universities accountable (P148). Quite appropriately, the author draws our attention to the challenges arising out of artificial intelligence and machine learning (AI & ML), which have made inroads into teaching-learning processes (P.151) Heeding the advice and suggestions made by Saidapur, will go a long way in remodelling our universities and repurposing higher education. The author's reflections on the future of higher education need to be taken seriously. The book ends with a brief Postscript. The 'Notes' section explains the intended meanings of various terminologies used in the higher education ecosystem, such as modern pedagogies, disciplines, open-electives, add-on courses, liberal arts, inter, multi and trans-disciplinary subjects, etc. The book is a must-read for all types of stakeholders in higher education. □

ATTENTION : SUBSCRIBERS UNIVERSITY NEWS

The NEW RATES of Subscriptions effective April 01, 2020 shall be as per following:

	Institutions	Teachers/Students/Individuals*	
	Rs.	Rs.	
1 year	1,250.00	500.00	*AT RESIDENTIAL ADDRESS ONLY
2 years	2,200.00	900.00	

The payable amount is required to be remitted **in advance** by any of the following modes of payments:

- a) AIU WEB Portal (b) Cash Deposit (c) Demand Draft/At Par Cheque and (d) NEFT/RTGS/Net Banking/G-Pay/BHIM APP, etc.

1	Bank Account No.	0158101000975 (Saving)
2	Beneficiary Name and Address	ASSOCIATION OF INDIAN UNIVERSITIES 16, Comrade Indrajit Gupta Marg, New Delhi – 110 002
3	Bank & Branch Name	CANARA BANK, DDU MARG
4	Bank's Address	“URDU GHAR”, 212, Deen Dayal Upadhyaya Marg, New Delhi – 110 002
5	Branch Code	0158
6	IFSC Code	CNRB 0000158
7	Contact No. & E-mail ID	(011) 23230059 Extn. 208/213 (M) 09818621761

THE NEFT/RTGS/ONLINE PAYMENT TRANSACTION/UTR NUMBER MUST BE SENT BY MAIL IMMEDIATELY WITH COMPLETE MAILING ADDRESS & PIN CODE FOR LINKING AND ITS SETTLEMENT AT OUR END.

*For further information/enquiries, send Mail at : subsun@aiu.ac.in / publicationsales@aiu.ac.in
Website : <https://www.aiu.ac.in>*

Education - Empowerment - Employment: Community College Movement in India 25 Years (1996 - 2021)

Fr Xavier Alphonse, S J*

The mission of the Community College movement is to “include the excluded and give the best to the least” for the last twenty-five years (1996 - 2021). Empowering the marginalized and disadvantaged society, economically and educationally.

The Community College movement started in India in 1995. As the Community Colleges were emerging there was a need felt by the Colleges to have a coordinating agency. To respond to this, need the Indian Centre for Research and Development of Community Education (ICRDCE) was started in 1999 in Chennai. It is an undertaking of the Jesuits of Tamil Nadu Province to help and serve the Community College movement. It is in accordance with the Jesuit mission of option and love for the poor and marginalized.

ICRDCE aims to empower the disadvantaged youth through skills development leading to employment, thus making a difference in the lives of urban/rural/tribal youth, especially women. ICRDCE acts as a nodal agency to coordinate all the Community Colleges in India, and has been involved in the preparation, establishment, monitoring, and evaluation of 288 Community Colleges in 19 States of India. It aims at the Empowerment of the Disadvantaged through appropriate skills development leading to gainful employment in collaboration with local industrial establishments and potential employers, and community leaders after taking into account the opportunities available for employment and self-employment in the local area.

It has also trained 3,597 teachers from all over India, The Centre has conducted 173 Workshops involving 3,554 NGOs, 9,903 participants, and has also organized 15 important National Consultations and 94 Regional Consultations among Community

** Director, Indian Centre for Research and Development of Community Education, No.30 Veerasamy Street, Egmore, Chennai - 600008 (Tamil Nadu). E-mail: icrdcecc@gmail.com*

Colleges and 6 international Conferences. It has also prepared the basic curriculum material and supplied it to all these Community Colleges. It has published 44 books (ISBN “978-81-937318-0-2”) and 115 articles in the leading educational journals of India and abroad on the concept and implementation of the system. The Centre also has up-to-date documentation on the movement by way of newspaper clippings, video, audiotapes, photographs, etc. Thus, it has become an international Resource Centre. ICRDCE is accredited as the approved training partner of the National Skill Development Corporation (NSDC) under the Ministry of Skill Development and Entrepreneurship, Government of India.

Impact: Capacity Building

More than 141,911 students have attended Community Colleges from different parts of India of whom 70% are women, and 100% come from economically marginalized backgrounds. In association with 2680 industries in specializations, 82% of ICRDCE students have joined the workforce and 18% pursue higher education. After passing through the Community College System 82% of the students are employed. In most cases, their family income has doubled. It has led to poverty alleviation through income generation. The concept has become a secular one transcending religions, castes, and languages. It is truly a nation and capacity-building exercise.

The Centre enjoys the Pan Indian presence with 1. Andhra Pradesh-12, 2. Assam-3, 3. Bihar-5, 4. Chhattisgarh-7, 5. Goa-1, 6. Gujarat-3, 7. Harayana-3, 8. Himachal Pradesh-1, 9. Jharkhand-27, 10. Karnataka-37, 11. Kerala-8, 12. Madhya Pradesh-13, 13. Maharashtra-11, 14. Meghalaya-1, 15. Odisha-7, 16. Puducherry-3, 17. Tamilnadu-135, 18. Uttar Pradesh-3, 19. West Bengal-8 Total 288 Community Colleges.

Relations with Governments

At the direction of the Ministry of Education (Erstwhile Ministry of Human Resource Development), the Government of India, the National Institute of Open Schooling (NIOS) has given accreditation to more than 25 Community Colleges in India. Tamil Nadu Open University has recognized Community Colleges in Tamil Nadu as Vocational Programme Centres offering 20 Diploma Courses.

Special mention about ICRDCE by the Union Planning Commission document. The ICRDCE-Community College movement has drawn the attention of the Government of India from the year 1999. In the Planning Commission documents of the 9th, 10th, 11th & 12th plans there is mention of Community Colleges. There is a special mention in the 12th Five Year Plan (2012 - 2017) as:

“21.222. Ongoing UGC initiative that supports career-oriented add-on courses in traditional universities and colleges and the IGNOU’s scheme of Community Colleges should be reviewed. Technical support from Philanthropic Foundations and the Indian Centre for Research and Development of Community Education (ICRDCE) (which has 230 Community Colleges in its fold) would be taken to build on the current initiatives and create a robust framework for skill-based education within the higher education sector in the country. This could include institutional arrangements for the recognition of prior learning. (Page No. 101, Vol:3).

National Skill Development Corporation (NSDC)

ICRDCE has become a Non-Funding Skill Certification Partner (Training Provider TP Reg. No: 38218) since 2018. As per this partnership, the students are trained by ICRDCE associate Community Colleges in India and their Skills will be duly certified by NSDC in 45 Job Roles (courses) from 14 Sector Skill Councils, So far, we have trained 8,555 students and placed them in jobs from this scheme. There are 76 approved Training Centres all over India under ICRDCE. The requirements of NSDC have been integrated with the features of the Community College system especially Life-Skills, English, Internship, and Placement.

Prison Project: Mahatma Gandhi Community College

ICRDCE has trained so far 1,465 inmates from nine Central Prisons of Tamil Nādu. The inmates are trained in the following job roles: Catering Assistant, Computer DTP, Animation, Automobile Service, Electrician, Fashion Designing, etc., After their release the quality of their lives has been changed and they have become responsible citizens and some of them have become entrepreneurs. Even some of the prisoners received Gold Medals in the Tamil Nādu Open University Examinations.

International Partners

ICRDCE has been awarded by the State Department of USA “*English Access Microscholarship Program*” for 130 students in Chennai, and 50 Students in Vishakhapatnam. The students are trained for 20 months for proficiency in the English Language. The outcome of the Program is that the students get better job placement or higher education opportunities. This program has been done in collaboration with the U.S. Consulate General in two consular districts of Chennai and Hyderabad.

Montgomery College, Maryland and Radford University, Virginia

In collaboration with US Consulate General in Chennai and Montgomery College, USA, ICRDCE has conducted the International Conference on Curriculum Development focusing on computer/information technology, health, and technology sectors for the Community Colleges in India in March 2016. A similar conference was organized in November 2017 in collaboration with the US Consulate General in Chennai, Montgomery College, and Radford University in the USA focusing on fashion design and education sectors. These two conferences helped the subject experts from the USA and India to discuss and update the existing curriculum in these sectors to suit the present conditions. The updated curriculum has been implemented in all the Community Colleges in India in the academic year 2018-2019 through ICRDCE.

East Africa and South Africa

ICRDCE has created ten Community Colleges in East Africa and South Africa. The book on life coping skills “*We Shall Overcome*” written by Dr. Xavier Alphonse, S.J., has been translated into

Afrikaners language with the title “*ONS SAL OORWIN - Vaardighedeom die lewe te hanteer*” (433 pages) and prescribed as a textbook approved by the Government of South Africa. The ICRDCE has trained more than 50 teachers from South Africa and East Africa since June 2005.

Papua New Guinea

Dr. Xavier Alphonse, S.J., was appointed as the Consultant to the Honourable Prime Minister of Papua New Guinea (PNG) for the creation of 13 Community Colleges in 2008 under the scheme “*Inclusiveness in Education for National Development through the Community Colleges*”. ICRDCE has trained more than 100 teachers from PNG.

Sri Lanka

The United Board for Christian Higher Education in Asia has missioned Dr. Xavier Alphonse, S.J., and ICRDCE to explore the possibility of converting Vocational Training Centres into Community Colleges in Batticaloa and Jaffna areas in November 2018 and also the introduction of Life-Skills in private and Government Schools in Jaffna area.

Community College Initiative Program (CCIP)

ICRDCE-Community Colleges 20 Students have been selected by the US Consulate of Chennai for the international educational exchange program. This program enables individuals from selected countries to study at a Community College in United States to develop professional skills. This programme is sponsored by the Bureau of Educational and Cultural Affairs of the United States Department of State. These students will be studying in Community Colleges in USA and their entire expenses will be met by the Government of USA.

University of Minnesota, Minneapolis

Dr. Martha Bigelow, Professor of Second Language Education, University of Minnesota has been appointed as the English Teaching Specialist by U.S. Consulate General Chennai for updating the Communication Skills Curriculum offered by Community Colleges in India.

American Association of Community Colleges (AACC), Community Colleges for International Development (CCID), and Common Wealth of Learning (COL), Vancouver invited Dr. Xavier

Alphonse, S.J., to make presentations on the Indian Community College System during their annual conferences.

Georgetown University, Washington D.C. team consisting of Dr. Thomas F. Banchoff, Vice President, for Global Engagements, and Fr. Julio Glulletti, S.J., Director of Georgetown University’s Centre for Intercultural Education and Development visited Chennai from 22nd to 25th February 2019. They visited ICRDCE, Two Community Colleges, and also met six directors of Community Colleges from Tamil Nadu and Karnataka. They have collaborated with us for various training programmes and research studies on the impact of the Community College System in India and long-term partnerships. Their visit was highly useful in terms of understanding the system and the training needs of the Community Colleges.

Life Skills

The unique feature of the Community Colleges is the curriculum it offers: i) Life - Skills making the person fit for life and fit for a job ii) Work-Skills iii) Internship and employment. Textbooks have been published on life skills to help the teachers and students have benefitted a lot from the life-skills programme and transformed and liberated by becoming holistic persons.

ICRDCE is marching on for the last twenty-five years, empowering the poor and underprivileged through training and employment. It is slowly spreading its wings to all the States of India.

Note:

Dr. Xavier Alphonse, S.J., is the founder of the Centre and a Jesuit Priest from Chennai Province. He is the founder of ICRDCE in 1999. He was the former Principal, of Loyola College, Chennai. He served two terms as a member of the University Grants Commission from 2006-2012. He is the father of the Community College movement in India. He propagated the concept of Community College from the year 1995. He has served on many committees of the Government of India such as the Union Planning Commission, Ministry of Human Resource Development, Minority Commission, State Governments to help higher education. He has been invited as the resource person in many national and international conferences on community education and higher education. He had extensive visits to U.S. Community Colleges. He is currently the Director of the Centre. Rev. Dr. M.S. Jacob, S.J.,

□

THESES OF THE MONTH

HUMANITIES

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

Geography

1. Archana Kumari. **Drinking water supply and its problems in Bhiwani City.** (Dr. Inder Jeet), Department of Geography, Maharshi Dayanand University, Rohtak.

History

1. Hembram, Singo. **The socio-cultural history of the Santal Tribe of Mayurbhanj District of Odisha (From 1947 A D to 2000 A D).** (Dr. Ratnakar Mohapatra), Department of History, Kalinga Institute of Industrial Technology, Bhubaneswar.

2. Patro, Bala Sivaji. **Impact of 'Kamasutra' on the temple art and sculpture of Odisha.** (Dr. Ramakanta Bhuyan), Department of History, Berhampur University, Berhampur.

3. Sandpa, Varsha Vashrambhai. **Contribution of Saurashtra's dalits in freedom movement of India (A D-1915 to A D 1947).** (Dr. Manisha Parmar), Department of History, Saurashtra University, Rajkot.

4. Sharma, Riya. **Prachin Bhartiya sahitya evam kala mein varishabh: Ek etihask adhyayan: Aarambhik kal se 13 vee sadi esvi tak Madhya Pradesh ke vishesh sandarbh mein.** (Dr. Prashant Puranik), Department of Ancient Indian History Cultural and Archaeology, Vikram University, Ujjain.

Languages & Literature

English

1. Anand, Milind Raj. **Issues of human rights in the select texts of dalit and African American literature.** (Dr. Alka Singh), Department of English, Dr. Ram Manohar Lohiya National Law University, Lucknow.

2. Bharati, P. **Art and craft of cultural translation: A study of selected Bengali and Hindi short stories of postcolonial period.** (Dr. M K Veena), Department of English, Kuvempu University, Shankaraghatta.

3. Das, Sonali. **The narrative styles in the selected novels of Kazuo Ishiguro: A study.** (Dr. Mousumi Dash and Prof. Ashok Kumar Mohanty), Department of English, Siksha O Anusandhan University, Bhubaneswar.

4. Ghaghda, Gopika Harkishan. **A search for self expression by the Afro-American "Womanist" writers the white world of story genre.** (Dr. Iros Vaja), Department of English, Saurashtra University, Rajkot.

5. Lalrinzuala, C. **The liminal space: A study of sexual ambiguity in select queer narratives.** (Prof. K C Lalthlamuani), Department of English, Mizoram University, Aizawl.

6. Mahantha, D U. **Aesthetics of art cinema with reference to the Indian context.** (Dr. Rajendra Chenni), Department of English, Kuvempu University, Shankaraghatta.

7. Nandal, Himani. **Traversing India: A study of select travel writers.** (Dr. Karan Singh), Department of English and Foreign Languages, Maharshi Dayanand University, Rohtak.

8. Parmar, Silpaben Thomasbhai. **Teaching of business communication at professional courses in Gujarat: An analysis.** (Dr. Jitendra Jain), Department of English, Gujarat University, Ahmedabad.

9. Seman Devi. **A descriptive study on Asif currimbhoy and his various major plays.** (Dr. Deepak Kumar Mudgal), Department of English, Bhagwant University, Ajmer.

10. Solanki, Muskan. **Postmodernist perspectives: A study of the select novels of Muriel spark and Iris Murdoch.** (Dr. Naveen Kumar Mehta), Department of English, Sanchi University of Buddhist-Indic Studies, Bhopal.

Hindi

1. Chhaiya, Dipti Kanabhai. **Narendra Mohan ke natakoan ka samikshatamak adhyayan.** (Dr. B J Patel), Department of Hindi, Saurashtra University, Rajkot.

2. Maheta, Vaibhavi Nitinkumar. **Nagarjuna ke upanyasoan mein vyakat lok-sanskriti.** (Dr. K C Desai), Department of Hindi, Saurashtra University, Rajkot.

3. Maru, Madhubala. **Gangour parva smbandhi Nimadi lok sahitya aur sanskriti ka samagre anusheelan.** (Dr. Uma Gagrani and Dr. Jagdish Sharma), Department of Hindi, Vikram University, Ujjain.

4. Nargesh, Dayaram. **Bhilalee lokkathaoan ka samagra anusheelan.** (Dr. Shashi Joshi and Dr. Shailendra Kumar Sharma), Department of Hindi, Vikram University, Ujjain.

5. Parmar, Nayana Kanjibhai. **Maitreyi Pushpa kee kahanioan mein nari sashaktikaran.** (Dr. Nazama M Ansari), Department of Hindi, Saurashtra University, Rajkot.

6. Patel, Bhavikaben Shankarbhai. **Dr Shankar shesh ke natak: Tatvik vishleshan.** (Dr. Mukesh D Patel), Department of Hindi, Veer Narmad South Gujarat University, Surat.

7. Pratap, Shailendra. **Markandeya ka katha sahitya: Samvedna aur shilp.** (Dr. Jagadish Sharma), Department of Hindi, Vikram University, Ujjain.

8. Vinita Kumari. **Nagarjuna ke katha-sahitya mein abhivyakt stree chetna ka swaroop.** (Prof. Oken Lego), Department of Hindi, Rajiv Gandhi University, Itanagar.

Odia

1. Das, Basanta Kumar. **Gajnjam Anchalara lokadebata O Biswas.** (Dr. Sameer Bhoi), Department of Odia, Berhampur University, Berhampur.

Sanskrit

1. Awasthi, Sweta. **The natyashastra based study of Mallikamakaranda composed by Acharya Ramchandra Soori.** (Prof. Shishir Kumar Pandey), Department of Sahitya, Central Sanskrit University, New Delhi.

2. Barmola, Sunil. **Impact of the influence of rising and setting of planets.** (Prof. Prem Kumar Sharma), Department of Siddhant Jyotish, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi.

3. Chandrika. **Yogashatatikanamanvayachandrikalaghuteekachandrakala khyanam sameekshatmakam sampadanam.** (Prof. Vijaypal Shastri), Department of Sahitya, Central Sanskrit University, New Delhi.

4. Dalai, Biprabar. **A study of epical dissertation on Ujjwalanilamani written by Rupagoswami.** (Prof. Makhlesh Kumar), Department of Puranetihasa, Central Sanskrit University, New Delhi.

5. Das, Priyanka. **A critical edition of Gitashankara written by Bhismamishra.** (Dr. Udaynath Jha), Department of Sahitya, Guru Jambheshwar University of Science & Technology, Hisar.

6. Jagadishbhai, Vasava Nishaben. **Yageyvalkaseysimriti mein samaj evam sanskriti**

ek adhyayan. (Dr. Bhavnaben Champaneri and Dr. Mayuriben Bhatia), Department of Sanskrit, Veer Narmad South Gujarat University, Surat.

7. Khot, Arvind. **Yogchintamani: Ek samikshatamak adhyayan: Brahadjatak sarawali, jatak pariijat ke alok mein.** (Dr. Shitanshu Rath), Department of Sanskrit, Vikram University, Ujjain.

8. Manasaranjan Pati. **Nageshabhimata Baudhdharthya sameeksha.** (Prof. Ram Salhai Dwivedi), Department of Navya Vyakarana, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi.

9. Mandloi, Varsha. **Shrimadbhagvat ke nari patre: Ek adhyayan.** (Dr. Bal Krishan Sharma), Department of Sanskrit, Maharshi Panini Sanskrit evam Vedic Vishwavidyalaya, Ujjain.

10. Muvel, Anil. **Shishupalvadh mahakavya ka alankar kee drishti se kavyashatriya adhyayan.** (Dr. Ratan Singh Anare), Department of Sanskrit, Vikram University, Ujjain.

11. Pahari, Sujal. **Contribution of Acharya Sitanath to sanskrit literature.** (Dr. Udaynath Jha), Department of Sahitya, Central Sanskrit University, New Delhi.

12. Pandey, Sneha. **Panchasayakavivaranasya sahibramvirachitasya patha-sameekshatmakam sampadanam.** (Prof. Harinarayan Tiwari), Department of Sahitya, Central Sanskrit University, New Delhi.

13. Prajapat, Dharampal. **Paniniyaashtadhyayeesthanam niyamniyamaksutranam madhyagamiswarupasya vimarshatmakamadhyayanam.** (Prof. Vishnukant Pandey), Department of Vyakarna, Central Sanskrit University, New Delhi.

14. Sen, Sangita. **A critical edition of Abhinavabharatakavyam by Ramavatara Sharma.** (Prof. Suryamani Rath), Department of Sahitya, Central Sanskrit University, New Delhi.

15. Shah, Dipal Manojkumar. **Shrimadbhagwadgectah: Dhampadsey cha sidhantnaha tulanatamakam adhyayanam.** (Dr. Suhas Jhala), Department of Sanskrit, Gujarat University, Ahmedabad.

16. Sharma, Kuldeep. **Study of Shivshakati Pilgrimages in Himachal Pradesh under Shivpuran.** (Prof. Sheetla Prasad Shukla), Department of Puranetihasa, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi.

17. Soni, Pratiksha. **Pandugranthreseydipikavriti sahitrehseyramayansey samikshnatamak pathsampadanam.** (Dr. Tulsidas Paroha), Department of Ved Ve-

dang evam Sahitya, Maharshi Panini Sanskrit evam Vedic Vishwavidyalaya, Ujjain.

18. Tiwari, Virendra Kumar. **A critical study of sahyalankar composed by Mahamahopadhyaya Rewaprasad Dwivedi.** (Prof. Sanandan Kumar Tripathi), Department of Sahitya, Central Sanskrit University, New Delhi.

Telugu

1. Rajeshwar, D. **Telangana Madhura Banjaralu.** (Dr. G B S Murthy), Department of Telugu Studies, Telangana University, Nizamabad.

2. Roopsingh, V. **Nizamabad Zilla Banjara shaityam-jeevana chitrana.** (Dr. V Triveni), Department of Telugu Studies, Telangana University, Nizamabad.

Urdu

1. Rehana Babu, Syeda. **Karnatak mein Tanzia-O- Mizahiya adab kee rivayat.** (Dr. Syed Sha Madar), Department of Urdu, Kuvempu University, Shankaraghata.

Performing Arts

Music

1. Sharma, Ashutosh. **Sangeet kee gayan vidhaoan mein jugal bandi kee parampara: Ek samikshnatamak adhyayan.** (Dr. Hukam Chand), Department of Music, Maharshi Dayanand University, Rohtak.

Philosophy

1. Bahuguna, Gaurav. **Critical study of Aniruddhavritti commentary of Samkhya Sutras.** (Prof. Shivshankar Mishra), Department of Philosophy, Shri Lal Bahadur Shastri Rashtriya Sanskrit Vidyapeetha, New Delhi.

2. Choudhary, Ajay. **Vartman priprekshya mein Yogdarshan evam Ayurved ka sahsambandh.** (Dr. Shobha aur Mishra), Department of Philosophy, Vikram University, Ujjain.

3. Goyal, Jyoti. **Bhartiya darshan mein dravya kee avdharna: Jain darshan evam vaisheshik darshan ke vishesh sandarbh mein ek adhyayan.** (Dr. T B Shrivastav), Department of Philosophy, Vikram University, Ujjain.

4. Khemananda. **An analysis of consciousness from a Buddhist perspective.** (Dr. Maya Kumari), P G Department of Darshan, Kameshwara Singh Darbhanga Sanskrit University, Darbhanga.

5. Kovida. **Feminine sensibility in major texts of Buddhism.** (Dr. Ramprवेश Paswan), Department of Darshan, Kameshwara Singh Darbhanga Sanskrit University, Darbhanga.

6. Mokka, Par. **A comprehensive study of Kilesa in Buddhist philosophy.** (Dr. Rajesh Kumar Singh), P G Department of Darshan, Kameshwara Singh Darbhanga Sanskrit University, Darbhanga.

Religion

Jainism

1. Jain, Shruti. **Vidyanandikrit asya sudarshancharithasya pathsameekshatmakam sampadanam.** (Prof. Sriyansh Kumar Singhai), Department of Jaindarshana, Central Sanskrit University, New Delhi. □

Concept
Since 1974

CBCS Bengali Text Book

মানচিত্র নির্মাণবিদ্যা

রমা সরকার দাস

2021 | 978-93-88937-96-2 | 184 | ₹ 650 (HB)

2021 | 978-93-88937-97-9 | 184 | ₹ 150 (PB)

নারী শিক্ষা

নাফিসা খাতুন

মুদাসসর নাজার বেদা

2022 | 978-93-5594-496-2 | 168 | ₹ 600 (HB)

2022 | 978-93-5594-497-9 | 168 | ₹ 150 (PB)

CONCEPT PUBLISHING COMPANY (P) LTD.

A/15&16, Commercial Block, Mohan Garden, New Delhi-110 059

Ph. : +91-11-41101460 Email: publishing@conceptpub.com Website : www.conceptpub.com

Showroom: Building No. 4788-90, Street No. 23, Ansari Road, Darya Ganj, New Delhi-110 002 Ph. 23272187



The Tangsas of Arunachal Pradesh

A Socio-Demographic Profile

Indira Barua
Deepanjana Dutta Das

2021 | 978-93-88937-70-2 | XVI+264 | ₹ 1100

Indigenous Ethnographies of North East India

A Study from EMIC Perspective

Edited by
Somenath Bhattacharjee | Anup Kumar Dey

2021 | 978-93-88937-71-9 | XVI+356 | ₹ 1350

CONCEPT PUBLISHING COMPANY (P) LTD.

A/15&16, Commercial Block, Mohan Garden, New Delhi-110 059

Ph. : +91-11-41101460 Email: publishing@conceptpub.com Website : www.conceptpub.com

Showroom: Building No. 4788-90, Street No. 23, Ansari Road, Darya Ganj, New Delhi-110 002 Ph. 23272187

THE C.E.S. COLLEGE OF ARTS AND COMMERCE

CUNCOLIM, SALCETE, GOA - 403 703

(Affiliated to Goa University)

email: principal@cescollege.ac.in

website: www.cescollege.ac.in

Applications stating full name and address, email id, contact number, age, self-attested copies of educational qualifications, experience and 15 years residence of Goa are invited from Indian Nationals, for the posts of **Assistant Professors** on regular basis in the following subjects:-

Sr. No	Subject	Regular basis
1	Commerce/Accountancy	01
2	Konkani	01

Reservation:

Out of 02 regular posts, 01 post is reserved for OBC.

For details of advertisement, visit College Website: www.cescollege.ac.in and for service conditions refer SC-16 of Goa University website : www.unigoa.ac.in

Sd/-

Date : 27.06.2022 (Dr. Sanjay P. Sawant Dessai)
Place : Cuncolim, Goa Principal

WANTED

A.S.S.P. Mandal's Maharaj J.P.Valvi Arts, Commerce & Shri V. K. Kulkarni Science College, Dhadgaon, Tal. Akrani, Dist. Nandurbar (M.S)-425414. Inviting application for the granted post of **Principal**.

Sr. No.	Post	No. of Post	Category
1	Principal	01	Isolated (Open)

Applications giving full details about educational qualifications, experience, etc. alongwith the documents should reach at the address of the **President, Adiwasi Satpuda Shikshan Prasarak Mandal, Dhadgaon, Tal. Akrani, Dist. Nandurbar-425414 (Maharashtra) within 15 days** of the publication of the advertisement for more information visit : www.nmu.ac.in

Hemat Bhika Valavi
President
A.S.S.P.M., Dhadgaon
Tal. Akrani, Dist. Nandurbar

Latthe Education Society, Sangli (Jain Minority Institution)

Wood House Road, Rajnemi Campus, Sangli,
Tal. Miraj, Dist. Sangli - 416 416 (Maharashtra)
(Affiliated to Shivaji University, Kolhapur)

(Permanently Granted)

WANTED

Applications are invited from eligible candidates for the following posts:-

Sr. No.	Name of College	Name of Post	Vacant Post	Unreserved Posts
1	Narayandas Sarvottamdas Soti Law College, Sangli	Principal	01	01
2	Ganpatrao Arwade College of Commerce, Sangli	Principal	01	01
3	Nemgonda Dada Patil Night College of Arts & Commerce, Sangli	Principal	01	01
4	Smt. Gangabai Khivaraj Ghodawat Kanya Mahavidyalaya, Jaysingpur	Principal	01	01

NOTE :- For detailed information about posts, qualifications and other terms and conditions, please visit University website : www.unishivaji.ac.in.

Hon. Secretary
Latthe Education Society,
Sangli

Place: Sangli

Madha Taluka Shikshan Prasarak Mandal's
K. N. Bhise Arts, Commerce and Vinayakrao Patil Science College
 Bhosare (Kurduwadi), Tal. Madha, Dist. Solapur (MS), Pin-413 208
 (Affiliated to P.A.H. Solapur University, Solapur)

(Grant-in-Aid)

WANTED

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Post	Vacant Post	Unreserved (Open) Post
A	Principal	1	1

Conditions :

- Educational qualifications, as per U.G.C. rules and State Govt. of Maharashtra norms, pay scales and service conditions are as prescribed by the Apex Body, Govt. of Maharashtra and P.A.H. Solapur University, Solapur from time to time.
- Appointment to the post of Principal will be for a period of 5 years from the date of appointment or upto the attainment of the age of superannuation of the candidate, whichever is earlier or as per rules time to time.
- For the post of Principal, candidate should submit their Academic research score as per U.G.C. norms at the time of interview.
- All the Terms & Conditions are applicable as mentioned in the letter No. JDHE SOLAPUR/NOC/1255/2022 dated 28.06.2022 from Hon. Joint Director (Higher Education), Solapur Region, Solapur.
- Applicants who are already in service they should apply through proper channel.
- T.A./D.A. will not be paid attending the Interview.
- Incomplete application will not be entertained.
- Apply giving full particulars **within 15 days** from the date of publication of this advertisement to the undersigned to President, M.T.S.P. Mandal C/o K.N.Bhise Arts, Commerce and Vinayakrao Patil Science College, Paranda Road, Bhosare (Kurduwadi), Tal. Madha, Dist. Solapur, Pin - 413 208.
- All the Terms & Conditions are applicable as mentioned in the GR Dated 12.11.2021 from Higher and Technical Education Department of Government of Maharashtra.
- Contact us : 9850181874,7447647721, bhagwanpingale@gmail.com

Place : Kurduwadi

Date : 04-07-2022

Secretary President
M. T. S. P. Mandal, Kurduwadi
 Tal : Madha, Dist. Solapur



Marathwada Legal & General Education Society's

MANIKCHAND PAHADE LAW COLLEGE

Re - Accredited by NAAC with 'B+' Grade [2019] ISO (9001): 2015

Samarth Nagar, Aurangabad - 431 001 (Maharashtra) ☎ 0240-2336621, 2341146
 email id : mplawcollege@gmail.com web address : www.mplawcollege.ac.in / www.mplaw.org

WALK-IN-INTERVIEW

Eligible candidates may attend 'Walk-in-Interviews' for the following posts at **M. P. Law College** for the academic year **2022-23**. **The Applicants can apply through google from link on our official website on or before 12th July, 2022**. After successfully filling the google form, they will be communicated the detailed schedule of the interview on their e-mail id / over mobile.

Sr.No.	Particulars	No.of CHB	Qualifications	Remarks
01	Clock Hour Basis Lecturer in Law for 3/5 Years LL.B Degree Course & LL.M. Part - I / II	09 (Both Semesters together) 15	L.L.M. B+, NET / SET * As per Govt. norms	Grant Non Grant
02	Teaching Assistant in Law	04	Post Graduation in respective Subjects of Law/ Social Sciences with B+ (Teaching in English Medium) * As per BCI norms	Non Grant (Consolidated Pay)
03	Teaching Assistant in Non-Law Subjects : Political Science, History, Economics, Sociology & English	04		
04	Experts in Teaching - German, French & Japanese on CHB basis	03	Proficiency in the concerned foreign language	Non Grant

*College official website for google form link: www.mplaw.org Incomplete google forms will not be considered.

Google form link: <https://forms.gle/58sMozaiSffqi7nd7>

Dr. C. M. Rao
Principal

Adv. Dr. Kalplata Patil- Bharaswadkar
Secretary

Adv. J.K. Wasadikar
President

WANTED

Application are invited for the Post of **Principal** to be filed in **Rajmata Jijamata Adhyapak Mahavidyalaya (B.Ed.), Shiv Nagar, Latur, Tq. & Dist. Latur** (Permanent Non-Granted) run by **Maharashtra Shikshan Mandal, Latur, Tq. & Dist. Latur (Maharashtra)**. Eligible Candidates should submit their applications alongwith all necessary documents **within 15 Days** from date of the Advertisement by **Registered post** only.

Sr. No.	Name of post	No. of post	Reservation
1	Principal	01	Unreserved

Educational Qualification as per NCTE (2014) and the Candidate shall possess the following qualification :-

1. Postgraduate Degree in Arts/Science/Social Sciences/Humanities/Commerce with Minimum 55%marks.
2. M.Ed. with Minimum 55%.
3. Ph.D. in Education or in any Pedagogic subject offered in the institution.
4. Ten Years of Teaching Experience in a Secondary Teacher Education Institution.

Desirable : Diploma/ Degree in Educational Administration or Educational Leadership.

Salary and Allowance : Pay Scale as per UGC, State Government, NCTE, State Government & Swami Ramanand Teerth Marathwada University, Nanded rules from time to time.

Note:-

1. Prescribe application form is available on the University **Website (srtmun.ac.in)**.
2. No. T.A./D.A. will be paid to attend the interview.
1. Eligible candidates those who are already in services should submit their application through proper channel.
2. All attested Xerox copies of certificates and other relevant document should be attached to the application form.

Address of Correspondence

Secretary
Maharashtra Shikshan Mandal, Kendre Building, Shiv Nagar,
Latur, Pin Code - 413512 (Maharashtra), Mobile No. 9765222279

Goa Vidyaprasarak Mandal's
DR. DADA VAIDYA COLLEGE OF EDUCATION
Shri Sitaram Kerkar Vidya Sankul
P.O. Box No. 139, Farmagudi, Ponda, Goa-403 401

Applications are invited with full Biodata from the Indian citizen for the following posts **for B.Ed.**

Sr. No.	Designation of the Post	No. of Posts	Nature	Category
1	Assistant Professor in Education (Methodology of Teaching Mathematics)	1	Regular	General
2	Assistant Professor in Performing Arts	1	Regular	Reserved for O.B.C.

For other details regarding qualifications, requirement, kindly refer **website : www.gvmcollege.com**.

Knowledge of Konkani is essential and Marathi desirable.

Pay and allowances and other terms and service conditions as prescribed by U.G.C., Goa University and Government of Goa.

Applications with photograph stating full name, Address, Telephone/Mobile No., email-ID, Age with Date of Birth, Teaching experience, Academic qualifications with percentage from S.S.C. and onwards alongwith copies of statement of marks of all public examinations, experience certificate and copy of the certificate for 15 years residence from the competent authority should reach the undersigned **within 20 days** from the date of publication of this advertisement. Persons already in Service should send their applications through proper channel. Break in service, if any, should be accounted for.

Above post will be filled subject to the NOC/approval from the Directorate of Higher Education, Govt. of Goa, Goa University and subject to work-load.

(Dr. Jojen Mathew)
Offg Principal

**DPM'S
SHREE MALLIKARJUN
&
SHRI CHETAN MANJU DESAI COLLEGE**

Delem, Canacona, Goa – 403702

Website: www.shreemallikarjuncollege.ac.in; Contact No. 0832-2633433

Email: shreemallikarjuncollege@gmail.com

Applications are invited from Indian Nationals for appointment to the following posts of **Assistant Professor** for the following subjects which should reach to the Principal **within 20 days** from the date of Advertisement.

Sr. No.	Name of the Post	Nature of Posts		
		Regular Basis	Contract Basis	Lecture Basis
01	Assistant Professor in Chemistry	-	05 01 (OBC) 01 (ST) 01 (EWS) 02 (UR)	01 (UR)
02	Assistant Professor in Botany	01 (ST)	01 (UR)	01 (OBC)
03	Assistant Professor in Zoology	-	01 (PD)	01 (ST)
04	Assistant Professor in History	-	01 (OBC)	01 (UR)
05	Assistant Professor in Economics	-	01 (OBC)	01 (UR)
06	Assistant Professor in Geography	-	01 (UR)	01 (OBC)
07	Assistant Professor in Information & Technology	-	01 (UR)	-
08	Assistant Professor in Sociology	-	-	01 (OBC)
09	Assistant Professor in English	-	-	01 (UR)
10	Assistant Professor in Hindi	-	-	01 (UR)
11	Assistant Professor in Konkani	-	-	01 (EWS)
12	Assistant Professor in Marathi	-	01 (UR)	01 (PD)
13	Assistant Professor in Commerce	-	01 (UR)	01 (UR)
14	Counselor	-	01 (UR)	-

UR: Unreserved, OBC-Other Backward Class, ST-Schedule Tribes and EWS-Economically Weaker Section, PD-Physically Disabled

Qualifications, Service Conditions, Pay Scales, Reservation, Domicile & Language knowledge clause as per direction of Government of Goa and Goa University. Other details are available on College website.

Note: All appointments are subject to the availability of Workload, approval of Government of Goa & Goa University.

Place: Canacona, Goa
Date : 28/06/2022

**Prof. (Dr.) Manoj S. Kamat
PRINCIPAL**



Chowgule Education Society's
Parvatibai Chowgule College of Arts and Science
(Autonomous)



Accredited by NAAC with Grade 'A+'

Best Affiliated College-Goa University Silver Jubilee Year Award

Applications stating full name, address, age with date of birth, educational qualifications with marks & percentage, experience etc. are invited for the post of **ASSISTANT PROFESSORS** and **College Counselors** for the academic year **2022 - 2023** in the subjects as per the details mentioned below :

Sr. No.	Subject	AIDED COURSES			Lecture Basis
		Full Time	Contractual Basis	Lecture Basis	
1.	Physics	----	----	2 Posts	1 Post
2.	Chemistry	----	1 Post - Leave Vacancy upto 07/01/2023	1 Post	----
3.	Botany	1 Post (ST)	----	1 Post	----
4.	Zoology	----	1 Post (EWS)	1 Post	----
5.	Geology	1 Post (ST)	----	1 Post	----
6.	Mathematics	----	----	1 Post	----
7.	Computer Science	1 Post (OBC)	----	2 Posts and 1 Post - Leave Vacancy upto 27/12/2022	----
8.	Geography	----	----	1 Post	----
9.	History	----	1 Post - Leave Vacancy upto 27/02/2023	1 Post	----
10.	Economics	1 Post (OBC)	1 Post (ST)	1 Post	----
11.	Philosophy	----	----	1 Post	----
12.	Psychology	1 Post (OBC)	----	1 Post	1 Post
13.	Sociology	----	----	1 Post	----
14.	English	1 Post (ST)	----	1 Post	1 Post
15.	Hindi	----	----	1 Post	----
16.	Marathi	----	----	1 Post	----
17.	Konkani	----	----	1 Post	----
18.	French	----	----	1 Post	1 Post
19.	College Counselors	----	2 Posts	----	----

VACANCIES WILL BE FILLED AS PER THE *STATUTE REGARDING THE WORKLOAD* OF THE GOA UNIVERSITY AND *SUBJECT TO THE APPROVAL* FROM DIRECTORATE OF HIGHER EDUCATION, GOA.

Requirement

- Minimum of 15 years of Residence in Goa.
- Knowledge of Konkani., additionally, Knowledge of Marathi shall be desirable.

For Educational Qualifications and all the other details, refer our College Website : www.chowgules.ac.in under >> Careers>>.

Applicants **should compulsorily fill the On-Line Application Form** available on College website www.chowgules.ac.in under >> Careers >> and **bring Original Certificates**, at the time of interview.

Direct application will not be entertained. The link will be open **only for 21 days** from the date of advertisement. Applicants **should submit** the application along with the **certified photo-copies** of the marks statement from S.S.C. onwards, **Residence Certificate** and **Certificate**, if belonging to **Reserve Category**, from competent authorities, by post to the **Principal, Parvatibai Chowgule College of Arts and Science, Autonomous, Gogol, P.O. Fatorda, Margao, Goa - 403 602.**

NOTE : If candidates of **reserved category** are not available, the candidates of **other categories** will be considered on **Contract/ Lecture Basis** for appointment.

Date : 30/06/2022

Offg. Principal



INVITATION FOR NOMINATIONS

SUN PHARMA SCIENCE
FOUNDATION
RESEARCH AWARDS-2022

&

SUN PHARMA SCIENCE
FOUNDATION
SCIENCE SCHOLAR AWARDS-2022

We invite Heads of Research Institutions, Universities, Medical and Pharmaceutical Colleges of India to nominate eligible candidates for :

**(a) Sun Pharma Science Foundation Research Awards-2022 and
(b) Sun Pharma Science Foundation Science Scholar Awards-2022**

The Sun Pharma Science Foundation Research Awards

are for excellence in original research in Medical and Pharmaceutical Sciences. There are three Awards of Rs.2,50,000/- (Rupees two lakh fifty thousand) each; two in Medical Sciences – (Basic Research and Clinical Research), and one award in Pharmaceutical Science.

The sponsored work of Indian Scientists, both in India and abroad, together with their bio-data, research achievements, awards received in the past and papers published, along with justification for nomination and citation on the research work, may be submitted online on Sun Pharma Science Foundation's website www.sunpharmasciencefoundation.net

Sun Pharma Science Foundation Science Scholar

Awards: There are four awards - two each in Bio-Medical Sciences and Pharmaceutical Sciences for Rs.50,000/- each, and an additional amount of Rs.50,000/- to attend international conference.

Indian nationals under the age of thirty (as on July 01, 2022), who have completed at least 1st year of MD or PhD in Biomedical or Pharmaceutical Sciences are eligible to apply. Those who have completed their MD, or PhD and above the age of thirty, as on date July 01, 2022 are not eligible to apply. The applicant should have completed a Research Project and should be willing to present his/her research work in front of knowledgeable assessors.

The applicants should submit:- (1) detailed CV with photograph (2) copy of their detailed research work (3) letter from the supervisor certifying that the research work under reference has actually been done by the applicant (4) a citation (brief summary) on his/her research work. (5) forwarding letter from the Head of the Department or Institution, giving justification for nominating the applicant (6) A voluntary declaration from the applicant that they would work in the public or private funded academic/research based organizations for a minimum period of two years after completion of his/her studies. The applicant should also submit the following testimonials.

- Aggregate marks obtained in PCB/PCM in Class XII, and Bachelor's/ Master's Degree
- Proof of age
- Copies of the publications, if any
- Merits/Awards/Scholarships received, if any
- A letter stating that the project submitted for the award has received ethical clearance,
- A statement duly signed by the nominee and the supervisor/co-author that the thesis has no-conflict of interest academically or financially.

The applicants should submit their nominations online at Sun Pharma Science Foundation's website www.sunpharmasciencefoundation.net from **July 01, 2022 to August 31, 2022**. Also required to send a print copy of the nomination, to the office of the Foundation **by September 15, 2022**.

Detailed nomination procedures of the awards are available on Sun Pharma Science Foundation's website.

For further information, please contact :

The Office of Sun Pharma Science Foundation

8C, 8th Floor, Hansalaya Building, 15-Barakhamba Road, Connaught Place, New Delhi : 110 001 (India)

Tel.(91-11) 23721414; 23721415 : E-mail : sunpharma.sciencefoundation@sunpharma.com

Website : <http://www.sunpharmasciencefoundation.net>



Central University of Haryana, Mahendergarh

(NAAC ACCREDITED 'A' GRADE UNIVERSITY)



Ph.D. Programmes

- Ph.D. Biochemistry
- Ph.D. Biotechnology
- Ph.D. Chemistry
- Ph.D. Civil Engineering
- Ph.D. Commerce
- Ph.D. Computer Science and Engineering
- Ph.D. Computer Sciences and Information Technology
- Ph.D. Economics
- Ph.D. Electrical Engineering
- Ph.D. English and Foreign Languages
- Ph.D. Environmental Studies
- Ph.D. Geography
- Ph.D. Hindi
- Ph.D. History and Archaeology
- Ph.D. Law
- Ph.D. Library and Information Science
- Ph.D. Management Studies
- Ph.D. Mathematics
- Ph.D. Microbiology
- Ph.D. Nutrition Biology
- Ph.D. Pharmaceutical Sciences
- Ph.D. Physical Education and Sports
- Ph.D. Physics and Astrophysics
- Ph.D. Political Science
- Ph.D. Psychology
- Ph.D. Sanskrit
- Ph.D. Sociology
- Ph.D. Statistics
- Ph.D. Teacher Education
- Ph.D. Tourism and Hotel Management
- Ph.D. Yoga

Features of the University

1st Central University to introduce 4 years Graduate degree programme.



Training & Placement Center



Fully wifi Green & pollution free campus



Hostels for Boys' and Girls' Students



Fully equipped Labs & Libraries

Post Graduate (PG) Programmes

M.A.

- Economics
- History
- Political Science
- Psychology
- Sociology
- English
- Hindi
- Journalism & Mass Communication
- Sanskrit

M.Sc.

- Chemistry
- Environmental Science
- Geography
- Mathematics
- Physics
- Statistics
- Microbiology
- Biochemistry
- Nutrition Biology
- Biotechnology
- Yoga

M.Tech.

- Energy System & Management
- Structural Engineering
- Computer Science and Engineering

M.Lib. & Info. Sci.

- Library and Information Science

M.Pharm. (Pharmacology)*

Law

- LL.B.*
- LL.M.

MHMCT

- Master of Hotel Management and Catering Technology

M.P.Ed.

- Physical Education and Sports

MCA

- Computer Science & Information Technology

MTM

- Master of Tourism and Travel Management

M.Com.

MBA

M.Ed.

B.Ed.

P.G. Diploma in Rehabilitation Psychology (PGDRP)

Advance Diploma in Child Guidance and Counselling (ADCGC)

Under Graduate (UG) Programmes

- B.Voc. (Retail and Logistics Management)
- B.Voc. (Bio Medical Sciences)
- B.Voc. (Industrial Waste Management)
- B.Tech. in Computer Science & Engineering
- B.Tech. in Electrical Engineering
- B.Tech. in Civil Engineering
- B.Tech. in Printing & Packaging Technology
- B.Sc. (Hons) in Psychology
- Integrated B.Sc.-M.Sc. in Physics
- Integrated B.Sc.-M.Sc. in Chemistry
- Integrated B.Sc.-M.Sc. in Mathematics

*Admission in LLB. & Pharmacology Programmes will be provided subject to the approval of the concerned Regulatory Body i.e. BCI and Pharmacy Council of India respectively.

For information :



www.cuh.ac.in



@cuofficial

Registrar