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**K Radhakrishna Murty**

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Transformation through Tech-education  
– Convocation Address

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# Social Sciences in India, Yesterday, Today and Tomorrow: An Emic's Critical Appraisal

K Radhakrishna Murty\*

Generally speaking, social science can be defined as the science of society that explores the laws of motion of society. If there are no laws of motion or no generalizations about the social phenomena possible, then there can be no social science. As all are aware, the social phenomenon is a product of intra or inter-cerebral interactions of human beings. Such phenomena are open to generalizations and theory construction as evident from the history of humankind. In other words, social life has always been subjected to inquiry and critical probing throughout human history. It has been a human drive to push the boundaries of knowledge further, to come out of ignorance, the basic motivation being to explore the secrets of life. Much before the organisation of knowledge in a systemic form about social life, thinking human being from great sages and saints to social reformers have had incisive contemplation of their social environments. So we have a prehistory of social theory contributed by the sharpest Jural-religious thinkers or philosophers of great antiquity. The common thread of all such speculative as well as incisive thinking is to seek answers to the organising principles of social living. The twin concerns as to how a society holds meanings for its people and how to make such living better, have remained at the core of every social thinking and thought pattern. In other words, starting with speculation, man's thinking and thought reached to a stage of positivism with the help of rationalisation and enlightenment as contributed by the European Renaissance movement of the 18<sup>th</sup> century. Exactly during that period, social sciences took their birth influenced by the currents and counter-currents of conservatism, liberalism and radicalism advocated and propagated by classical thinkers drawn from different branches of the so-called social science all over the world.

## Birth of Social Sciences in India

In India, the roots of social science, social research, and normative social thought can be traced at least as far back as Manu's *Dharmasastra*. This was a comprehensive study of Indian society as it existed at that time though its emphasis was more on the moral and normative aspects of social and economic actions. On the other hand, Kautilya's *Arthasastra*, was essentially a treatise on State Craft describing the political and economic structure and functioning of the then-Indian Society (Sharma: 1992:26-42). India has also been the subject of social science research for both Asian and Western Scholars for many centuries (eg. Megasthenes (324-300 BC); Al Biruni (1030

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AD; Bernier (17<sup>th</sup> century); etc., though most of their accounts were based more on personal observations than on scientific inquiry, they do present vital sources of data and information for modern social science (Dube: 1980:53).

Social sciences began to develop in India during British rule in the 19<sup>th</sup> century. Since the British elite were unfamiliar with Indian Society, its culture, and social institutions, and ways of life of Indians, they began to collect extensive data on these aspects only to obtain a clear understanding of the native society that facilitates their ruling. With the introduction of the Western education system in India with English as the medium of instruction, new educational institutions and associations at various levels were created to cater to the needs of teaching and research in all sciences including social sciences. To a large extent, these changes formed the basis of modern social science research and teaching in India (see for details: (Sharma: 1992:26–42). Several scholars and writers considered and viewed the social sciences as a means to solve many of the then social and economic problems that prevailed in the society and used these sciences more as an ideological tool than as an analytical apparatus (Alagh: 1985, 26-27). Thus India produced many economic, social, and political thinkers and writers during this period who even though were often influenced by Western thought, they did pave the way for the development of social sciences in the country.

### **Growth and Development of Social Sciences**

Soon after India attained independence during 1950's, Social sciences started their growth both in teaching and research under the umbrella of Universities and specialised research institutes. Being faced with acute problems like poverty, illiteracy, population growth and underdevelopment of the economy, the Government of India felt the need for seeking solutions to contain these problems. For that the need for accurate socio-economic data became vital to ensure and strengthen government planning in addressing itself these significant problems efficiently and sufficiently. Accordingly, a number of prominent economic research institutes came into existence during this decade (Delhi School of Economics, The Indian Statistical Institute at Calcutta, and the National Council of Applied Economic Research at Delhi, etc.,) But all this was marked by a disproportionate emphasis being placed on it. Economics which

became 'the Queen of Social Sciences' (Satyamurty: 1984:5).

It was only during 1960's that the importance of other social sciences began to be recognised in our country. As the government's need for more broad-based information in fields other than Economics increased, new social sciences like Sociology, Anthropology, Political Science were encouraged in Colleges and Universities as teaching, learning and research subjects and new social science institutes for doing research in these subjects were set up. The most significant step in this direction was the establishment of the Indian Council of Social Science Research (ICSSR) in New Delhi in the year 1969 which marked a turning point in the development of Social sciences in India. The ICSSR and the already established University Grants Commission (UGC), both have played a very significant role in promoting Social science research and teaching in the country not only by motivating and encouraging individual researchers but also by promoting the growth and sustenance of social institutions and university departments. Not only this, during this period (1960-70) many noted institutions like the Council for Social Development in Delhi, Institute for Social and Economic Change in Bangalore, the Madras Institute for Development Studies, Tata Institute for Social Sciences at Bombay, Gokhale Institute of Politics and Economics in Pune, and A.N. Sinha Institute of Social Studies at Patna, etc., were established to encourage social science disciplines.

The objectives behind the creation of these notable institutions are: to institute and administer fellowships to eligible individuals at Junior and Senior levels for doing research in social sciences; to sponsor programmes and projects to institutions and individuals for undertaking research; to organise, sponsor, and finance seminars, workshops, etc., to undertake publications of research journals and books related to social sciences; promote studies related to social development—its planning and policy formulations; and work as "think tanks" in supplying needed inputs to Central and State governments drawing and utilising the findings generated by social scientists.

Coming to the important aspect of the study of the development of Social sciences in terms of teaching and research is funding. As identified by Myron Weiner (1979) there are three ways in which

social science research is funded in India. (1) ICSSR and UGC provide needed funds to the departments of Social Sciences and research institutes and their researchers by way of recurring and non-recurring grants on a selective basis; (2) Institutes and individual researchers receive grants directly from operating Government departments, Ministries, Commissions and Public Sector Firms and (3) research funds provided by International Organisations and U.N. Agencies like UNESCO, FAO, ILO and WHO and Ford Foundation and the World Bank, etc.,

Thus, the growth and development of Social Sciences in India during 1960-2000 period can be attributed to the governments' need for social science research in the formulation of policies and implementation of its development plans, the importance of social science research in solving India's innumerable socio-economic problems and the influence and contribution of some outstanding social scientists through their acknowledged research works.

### **Decline Stage of Social Sciences**

However, unfortunately, the fag end of the 20<sup>th</sup> century witnessed a decline in the role and status of social sciences in the country for various factors that operated within the country and abetted by external forces like globalisation and the revolution in Information Technology that started during the 1990s. Today, all over the country the stakeholders of social sciences tend to feel that the role of these sciences became pale, and insignificant with no societal utility, and researchers in these sciences have lost their credibility, all resulting in a crisis situation facing the threat of their eventual extinction event. Great subjects with literature of high quality and perspectives of knowledge and understanding which are vital for our times are in danger of faltering, of being diminished impoverished, and despoiled.

The demands for relevance and accountability to societal changes were becoming more and more stringent. In the course of the evolution and expansion of social sciences, applicational issues, interests and concerns were side-lined or totally avoided. Social scientists tend to believe and view their efforts to apply social sciences as inconsistent with the canons of basic sciences. As pure scientists, they also learned that they need not be too concerned about the utility of their ideas and theories. Above all, they were cautioned against violating the norm of

value neutrality. Further, the traditional professional socialisation that most of the contemporary social scientists in our country underwent seems to create a "trained incapacity" to apply social sciences - their principles, theories, and methods to address the social and economic problems to contain and control them and to transform these sciences into a reflexive and useful one catering to the needs of the public at large in the emerging new contexts. As a result, social sciences so far were sustaining themselves on utopian ideas, and social scientists were concerned more with their professional identity and interests. Today, social sciences by and large are charged with the failure to impart trained competence and employable skills to their students. To Bakshi (2006) social scientists in India are facing criticism for not taking an interest in matters affecting people at large. This is due to the insistence of these researchers on making inquiries strictly according to the norms of scientific reasoning, whether it helped them in developing reliable knowledge or not, preventing them from doing socially relevant work. This might appear puzzling to many, for it is not clear how enjoining scholars to write with clarity or precision could result in making their research socially irrelevant. They would regard relevance as one of the important norms to regulate scientific inquiry. Although they might admit that scholarly work is often done merely to satisfy curiosity or for the sake of acquiring professional competence, they would insist that the task is to work on issues that are socially relevant. Then the question is how to make research in social sciences relevant. It is hard to deny that those who insist on precisely measuring social phenomena are likely to focus on subjects they can study with the help of methods at their disposal, thus making their methods the criterion for selecting subjects for investigation. The trouble, however, is that methods can not guide us in deciding what to study. Indeed this reverses the relationship between methods and subjects for investigation. For, we can rationally, decide what methods to use only in the light of the problems we want to study. Instead of selecting problems amenable to the methods at our disposal, we should first decide what to study. It is possible that we do not even have the methods to study the problems in which we are interested. But, instead of ignoring them, we should try to develop methods for studying them. Again to Bakshi, "the truth is that interesting and difficult methodological questions arise when we face problems which do not

yield to the methods at our disposal” (2006:146). This view has a strong appeal for all those dissatisfied with the kind of research in which social scientists are then interested. In a country like ours which is facing myriad social problems, the contention that social scientists should contribute scholarly inquiries in the pursuit of beauty and creativity essentially by their academic pursuits, the same never holds good and there may not be much sympathy for this view, unlike the most developed countries which succeeded in containing such problems. Hence the feeling that the work of social scientists should be relevant to the needs of society is a major consideration in the debates and discussions among contemporary social scientists in the country. In other words, social scientists need to concentrate in the future on the acutely prevailing social problems faced by society exploring the relationships between intentions and effects, consequences, and results of action rather than showing their interest in analyzing events which have already taken place.

### ***Poor Show in Teaching and Learning in the Universities***

A useful and indicative way of gauging the status of any discipline at any level is taking note of the general way in which any discipline is perceived by most of its teachers and students. While the disciplines considered difficult may attract meritorious students, for the average student pursuing higher education, the choice of subjects has always been determined by how easy it is to graduate in a given discipline. Such perception functions as a “self-fulfilling prophecy” wherein practitioners suffering from rust tailor their practices within the learning context to fit the level of soft and easy. This is no doubt an unfortunate situation because in every dimension of the learning context, be it pedagogical practices, teaching materials, syllabi, evaluations, etc., the general tendency has been to direct one’s teaching and evaluation towards the students with a low ability for comprehension. To what extent does the knowledge-field, its contents, methods, materials and practices contribute to a deterioration of the discipline? Only a deeper understanding of the learning context of social sciences could throw some light on this. Most teachers would agree that a rigorous and challenging learning context is crucially dependent on the intellectual competence of the teachers, the standard and quality of the teaching material transacted, the kind of pedagogical practices adopted by teachers

in the classrooms and the kind of knowledge which becomes the object of an inter-subjective engagement between the teachers and the taught. Clearly then, there is something about the nature of knowledge in social sciences that renders it redundant in the face of some alternative. Quite pathetically discussions in the social sciences classrooms very rarely break free from the expressed positions on any given subject matter held by the teacher. If the teacher is reasonably well informed on the subject and sensitive to the experience of the subject learners, the latter can benefit greatly from such discussions turning their engagement with science into a more critical and reflexive one. However, on the other hand, for the teacher whose only objective is “Bell and Bill”, preparing the students to pass the examinations somehow, such discussions are never welcome. Neither are they initiated nor are they encouraged since such discussions can often unsettle and threaten the teachers’ own knowledge of the subjects. The net result is that the learning context for social sciences provides a deeply alienating experience for the learners as not only are their own subject experiences never the object of scientific learning, the knowledge of the Indian society they come to acquire within the scope of any social science offers no resemblance or connections to the everyday world they inhabit.

From the standpoint of the learning context, besides the institutional arrangements that work towards the dilution of rigor in a subject, there is also the very substantive and subversive role performed by teachers in ensuring that the syllabus remains “soft and easy” with no frequent additions of the latest trends developed in the subject and they act as a block to undermine any radical changes to the syllabus. This, in fact, endorses mediocrity and a trivialisation of social scientific knowledge and poses a serious problem for raising the standards of teaching within the learning context. In this context, it is felt that after all it is the practitioners of these sciences who can radically transform the status of these disciplines from their present status as soft and easy disciplines to a critical and reflexive inquiry into human society. Today, the relationship between knowledge production and knowledge transmission is characterized by a growing sense of discontent that promotes the practices of social sciences critically lacking in relevance for the student of Indian society in its various dimensions. The mere instrumentalist pursuit of teaching and learning by the role set influenced by a mutually convenient approach has

produced social sciences that are bereft of reflexivity and devoid of any critical engagement with the complex and turbulent realities confronting Indian society today.

### ***Pathetic Scene Prevailing in Social Science Research in the Universities***

A noteworthy development that contributed to the crisis in social sciences is the economic one, namely, the increasing fund – cuts for Universities and most alarmingly in the budget allocated for social science education, including teaching and research. The neoliberal agenda has become clear also from the increasing political intervention from the State in academic and research institutions and bodies like UGC, ICSSR, ICHR, etc., destroying their autonomy. This negatively shows the threat that critical social science research poses to the neoliberal regime. As a result, “a new crop of social scientists is being cultivated which is bereft of any social concern who are more like clerks of social science hired by the government (Sinha: 2016: 15).

Another factor that caused the crisis in social sciences today is the increasing privatisation and commercialisation of higher education in India. Studies made by Pandian (2002) Partha Chatterjee (2002) and Papola (2010) have shown that funds cut and downsizing by the State are affecting premier social science research institutions in the country at every level: staff, library, research funds, and faculty. These studies have also shown how private funding has penetrated social science research in a big way demonstrating beyond doubt that research funded by such private funding agencies often do not have academic value, nor are they published. At the same time, research projects funded by them do not give the researchers the freedom to choose topics for research and the methodologies, control the dissemination of research findings and facilities available to them, all resulting in routine and carbon copy research with replicate findings.

The present poor show and the pathetic scene prevailing in social sciences is also due to the proactive involvement of politicians and the government in the recruitment procedures of teachers on the basis of political, regional, and another primordial criterion. Being the victims of a resources crunch, the Universities are unable to recruit teachers on a regular basis is another factor. It is a well-known fact that the programmes and facilities offered by UGC like

linking teaching with a research degree, its Faculty improvement programme, its creation of Academic staff colleges, and its Merit promotion schemes, etc., are mostly misused and abused, if not overused, by most of the teachers. The result is that these programmes instead of improving the Quality and efficiency of teachers, caused wittingly or unwittingly a lot of damage to the teaching and research activities. The bulk of products the social science researchers generated in most of the Universities were not original, innovative and virgin ones at all but mostly repetitive, replicative in nature solely meant for obtaining somehow a research degree decorated with symbolic and utilitarian equipment in the form of Ph.D., ultimately fetching the persons for an entry into the teaching profession or for getting a promotion but not contributing to improving their knowledge and skills in teaching and research. The ritualistic nature of the seminars, workshops and symposiums funded by UGC and ICSSR and conducted by the University departments and colleges start inevitably with inauguration and end with valedictory rituals and in between sightseeing and shopping of the participants resulting in their significant absenteeism during the scheduled periods of these programmes with no serious academic debates and discussions taking place. The same is the case with the orientation and refresher courses offered by Academic staff colleges. The course coordinators and the guest faculty associated with these programmes themselves are suffering from academic obsolescence. “The net result is that these seminars and programmes became the mills for generating participation certificates useful to the teachers in getting increments and promotions but not at all helpful in removing their rust and obsolescence” (Radhakrishna Murty: 2010). The schemes of major and minor research projects funded by UGC and ICSSR even though paid many dividends in the initial days in the form of generating a body of fresh, original and innovative research, of late such research produced become insignificant and unrecognised since it is associated neither with sound theory nor with rigorous scientific methodology. The findings of these studies generally are not at all useful for policy-making and problem-solving processes. The papers and monographs these researchers write with their findings are not even press-worthy. The result today is that most of the University based teachers and researchers in social sciences in our country have lost their faces and credibility show. Unfortunately, the availability of even meager funds meant for research has become a bane rather than a

boon. With all this, while the so-called researchers are moving from professionalism to popularism from societal utility to personal benefit, the products they create are not original but are associated mostly with plagiarism and even helped by ghost writers, abetted by the internet with cut and paste methodology.

But how even such research findings actually used and by whom, what needs are served by the research and to what extent do social science researchers serve as consultants and advisors to government departments, ministries, and commissions, what kind of policy-related research is conducted, in what way do our researchers contribute if at all to the generation of scientific knowledge for the making, implementation and critical evaluation of public policy, are some of the questions which have received little focus and attention. Further, knowledge in these areas is still elusive. Therefore is a wide gap between the administrators/officials and the researchers, with one blaming the other. While some officials believe that they know what needs to be done and that what they lack is not additional knowledge inputs, but additional funding, other officials justify their indifference to research findings on the ground that researchers lack the experience and know-how that might make their findings useful to administrators in formulating proper policies. Somehow, for these officials, the work of researchers is too academic and far removed from social reality. Thus both researchers and administrators in our country are unfortunately indulging in the game of one blaming the other. But the fact remains that most of the researcher's output is neither attracting nor demanding the attention of policymakers since it is lacking needed quality, usability and scalability. Of course, some Centrally sponsored leading Universities and Research Institutes located in major cities foster academic research cultures which include interdisciplinary work, knowledge production with emphasis on peer review and engagement with internal and external intellectual networks, and learned societies manned by faculty with national and international repute. However, the quality of research in the large majority of State-run regional Universities neither conforms to any academic standards nor have they been able to make a significant contribution to social science research, either theoretical or applied and policy-oriented in the country (DFID: 2011). Also, there is a visible tendency to publish books mostly edited ones, rather than papers in peer-refereed journals, and a

large number of publications appear in low-impact Journals which publish any papers on a payment basis collected from the authors as publication fee. In this way, numerous publishing rackets are emerging with the sole objective of generating the bulk of bogus publications against hefty payments from academic faculty which jeopardize the future of Indian academia by creating serious moral hazard and adverse selection problems in matters of academic evaluation and faculty selections (Ray et al : 2016, p.6). Part of the reason for this could be the mandated emphasis on publications for academic positions in the Universities. The second reason may be the lack of proper institutional support and funding for research since the university system emphasises teaching over research. Thirdly, the problem of language may be highlighted that prevents the researchers from writing research papers or reports for disseminating their findings. This is because the medium of instruction for these writers up to the undergraduate level and in some cases even up to the graduate level is the regional language. Hence, a large majority of the researchers find it difficult to overcome the transition and in articulating their findings and ideas in the English language while drafting the report or paper. For the same reason, the majority of doctoral theses in regional universities in India can not be published for wider circulation. As a result of all these factors, as rightly felt by Ray et al, "much of Indian social science research output does not even reach top-notch publications in global circulation. Hence they fail to meet the Western norms of quality measurement essentially driven by citations in the top-notch western publications. They are thus completely left out of the quality domain so defined" (2016:4-7).

Further, while much of social science research is undertaken to provide a database for public policy and also to assess and evaluate individual development projects, there is very little research being done which actually questions policy fundamentals or explains policy failures (Weiner:1979). Very often then, the explanation for a failed project is found in a lack of implementation rather than in the wrong choice of the policy itself. Of course with the exception of Economists most other social scientists "have rarely produced policy suggestions or criticised existing policies in such a way as to stimulate serious debate within intellectual circles" as rightly felt by Weiner (1979). But social science research can play a much more significant role in India's social and economic



development if public policy is interlinked with this research. Further, it is very much sad to note that in the contemporary universities in India, there is a lack of adequate interdisciplinary research taking place and there is still insufficient interaction between the various social sciences, with a result, much of the interrelated social, cultural, economic and psychological problems are still studied by unidisciplines rather than with multidisciplinary approach. Lamenting that India's social science research contributes more to public debate rather than to pushing the frontiers of knowledge for further research, Ray et al suggested two ways to improve social science research. First, it is absolutely essential to increase research funding for social science research to improve its quality, and secondly, there should be a concerted effort to encourage collaborations, especially international collaborations in social science research in India (2016:40-41). Accordingly, we should be able to institutionalise a mechanism to encourage and promote such collaborative research which will go a long way in augmenting the quality of social science research in our country.

The net result of all the above factors is that social sciences became the victims whose spirits are lost but bodies remained on the campuses with stinking smell waiting for descent funerals to take place. But when these funerals take place nobody knows. Meanwhile, the meager staff associated with these departments are watching these dead bodies since they are paid for it.

### **Implications of Globalisation**

Social sciences have become increasingly insular and self-referential over the past three decades and seemingly irrelevant to the present period of great social change. Students of globalisation tend to agree that it involves the bridging of temporal, spatial, and cultural distances in new ways, and that these processes tend to be driven by the revolutions in transport and communication technologies' and the internationalisation of capital. Notions of the world system, post-industrialism, the information society, and the new world order – all are reflective of efforts by scholars and political leaders to characterise and understand contemporary societal and global changes. Our own interest in globalisation has to do with its implications for the social sciences and for us as social scientists, as we go about our everyday business of studying the worlds of human beings. What then are the implications of globalisation for the social sciences? In this context, Anthony Giddens (2004)

rightly felt that students of globalisation are modifying well-worn concepts and attempting theoretical shifts in order to better understand changes at the global level. Most recognise the vast implications that globalisation has for the social sciences in terms of meta-theory, conceptual frameworks, methodologies, and institutional forms. To him, globalisation as a complex mixture of processes is giving rise to a post-traditional social order. It includes not only politico-economic changes but socio-cultural changes as well. For instance, although economic restructuring and reengineering have produced unpredictability, uncertainty and fragmentation, there also are the unifying effects of shared (emergent universal) values (e.g. sustainable development, social inclusion and exclusion, the sanctity of human life etc.) and the common interests and risks that accompany the intensification of global interdependence. Within the post-traditional social order, those taken-for-granted practices we call traditions suddenly become objects of public discourse. The result is that social reflexivity is intensified as globalisation sweeps individuals into a wider world that disrupts and transforms local life styles and then reintegrates them at a broader level. Interestingly a science like Sociology is today characterised by two features: chaos and insularity and has given little attention to the massive changes that are taking place at the global level today. Instead, the discipline has been caught up in a decades-long internal discourse centering on epistemological, ontological and methodological issues divorcing from the real world. In addition to the theoretical chaos, Sociology also has been differentiating rapidly so much that Irving Horowitz laments about the "decomposition of sociology". To him sociology "... has become so enmeshed in the politics of advocacy and the ideology of self-righteousness that it is simply unaware of, much less able to respond to, new conditions in the scientific as well as social environment in which it finds itself" (2014 : 5). The discipline has broken up into a multiplicity of specialisations, each going in its own way and without much regard to the others. Within the insulated discourse of well-known mainstream sociological theorists the focus has tended to be on macro-micro linkages (Coleman : 2004), the resurrection of general theory (Turner : 1990) and the integration of social systems linking with quantitative methods and models (Coleman : 2004). In this context, globalisation has emerged as a political economic reality without any systemic attention by sociology giving merit to the view that

sociology indeed has become divorced from reality. Anyone may agree with Coleman whose vision for sociology holds that sociological theory should have utility for the on-going functioning of society. After all, if our work does nothing to ameliorate the human condition, then we might as well remain stuck in internal discourses that focus on formal aspects of theory and keeps us disconnected from real-world process, for there are no consequences to our work beyond academic careers.

### **What to Do Then?**

After all, the debates that raged on social science platforms all over in the last century will echo through the present 21<sup>st</sup> century and hence their influence on contemporary social sciences are to be expected. A logical reaction to this nature is to make social sciences not only academically rigorous but also useful in tackling problematic situations in contemporary society with the belief that the credibility of science and the employability of the graduates of that science is a function of the skills acquired by them to analyse and to find solutions to practical problems encountered and experienced by the people from time to time. To fulfill this task, the modern man needs social imagination, a quality of mind that enables him to understand the link between the individual and society, between the biography of the individual and the history of societies. Therefore stress is to be given that relevance, accountability, and applicability must now surface as the salvaging criteria of the professional practice. In other words, social sciences have much to gain by moving toward their application and thus changing their orientation. An application could be a possible means to counter the problems being faced by the social science disciplines at present.

Thus, there are failures on the part of the social scientists to connect theory with practice and that of the practitioner – faculty like professional social workers in linking their instruction with the generalizable insights or theory. Most teachers of these social sciences do not have exposure to practice and then the connection between theory and practice becomes a challenge. After all, one can expect application orientation and interdisciplinary nature as the hallmarks of the teaching programmes in social sciences. However, the apparent disconnection between theory and practice is rooted in the character of social science disciplines that are taught in universities. Even their teaching of these subjects

could not enable the students in developing critical and analytical reflections in their outlook. This problem of disconnect between teaching and practice aggravated further over time since the universities started focusing on research by their teachers by including their research output as an indicator for promotions.

Hence, what is needed today is a change in the very methodology of recruitment of teachers and a change in the teaching orientation by which the implicit application content of the science is made explicit through classroom teaching. As the teaching of social sciences calls for a proper balance between theoretical knowledge and practical exposure of the students, the importance of fieldwork, field orientation, and field reports as tools for effective teaching of our sciences in linking “book-view” with “field view” need not be overstated. In fact, lack of field orientation and the consequent failure to impart readily employable skills to the students is our weakness. The future vision of our departments should focus on such weaknesses.

Another pertinent dimension of the present problem is that there are multiple changes in global social science research causing anxiety among the academic world and researchers. Among the factors that cause the most anxiety are those that require constant flows of production, counteracting the time of reflection inherent to the research and discovery. The new procedures altering substantially the routines of researchers and institutions in this area have caused insecurity in so far as the production is measured in terms of quantity and not quality in line with the production of goods and services in the capitalistic mode of globalisation. In this assessment, indicators are individually and collectively evaluated using biblio-metric tools where the citations require great importance. Associated with this aspect is the dissemination of results which, in the social sciences has acquired new dimensions with the use of new technologies and academic marketing. If until the 1990s, classes, seminars conferences and subsequently research articles and books were the major devices of communication among peers, since then, the dissemination system has changed significantly. On the one hand, emerge specialised sites located by internet global search identify specific topics and authors and on the other hand, universities, research centers and publishers invest heavily in advertising their professors and researchers as well as their works in order to gain visibility and to improve their ratings

and grades in the evaluation process so as to attract students, researchers and funds, all in line with the practices being adopted in Western Universities.

In such a scenario, should we continue conducting most of our research within the confines of the nation-state? Should comparative research be on the rise and should we modify our concepts in efforts to capture the emergent global reality that is developing our worlds? How will global research be financed and what role all our social sciences have in the conduct of global research? Although we are not able to address yet these questions, they should cause us to give serious consideration to the trajectory and relevance of the social sciences in contemporary times. Clearly addressing these questions and issues is an immense and daunting challenge that requires the systematic attention of a community of social scientists. The cultural lag that exists between the development of a global economy and the development of mechanisms by which to systematically study that economy and its effects remains a significant, if not huge challenge. Unless professional research organisations and universities begin to support research on global issues, the overwhelming majority of social scientists will find it difficult to conduct systematic research at that level. Present-day social science research confining mostly to area studies, that too, at micro-levels, need to be replaced by research pertaining to issues of transnational and global dimensions so prominent in the world today. Moreover, as we seriously consider the globalisation of social scientific research, we have to critically reflect upon the broad cultural assumptions that under grid our research ethics and how they might fit with or against those of our colleagues abroad. In the context of such eventual situations that emerge, are the Indian social scientists prepared to move beyond a model for internationalising social science, whose main concern is with improving how others practice our precepts? But through dialogues, discussions and collaboration on research with peers from other countries, we might hasten the achievement of consilience which means the “jumping together of knowledge as a result of the linking of facts and fact-based theory across disciplines to create a common framework of explanation” (Wilson : 1998). Such global consilience, then, is our challenge in the near future.

Also, there is an imperative need to recognise the fact that social science analysis is not only recording facts and creating Excel sheets of quantitative case

studies, but is a critical analysis of all the aspects of society in a holistic perspective that contributes to the efforts of the human beings to understand their entire existence, the problems of this existence, and the possible ways of solving these problems. In this sense, “social science can not just be a quantitative or even hermeneutic exercise, but a critical and subversive exercise. Any other idea of social science will definitely lose its claim on the status of science. Consequently, any critical social science can not just be based on explanation or interpretation of social phenomena precisely because any scientific knowledge is crucially based on social practice” (Sinha: 2016:7). Social science as a form of knowledge, like any other form of knowledge, originates from social practice. Therefore, a genuine social scientist can not be an “unengaged” social scientist. In such a scenario, it is essential that social sciences base themselves on a critical and confrontational social theory instead of conformism and status quo-ism. The present crisis of social sciences stems from the fact that the critical social theory has been pushed into oblivion. As a result, “unlike the 1970s, 1980s or even the early 1990s, when almost every year witnessed the publication of some social science research works that led to a new radical and subversive critical understanding of social change and contributed to progressive paradigm shifts, we seldom see such research work after late 1990s in India”. (Sinha 2016 : 10). Hence, putting all these above-mentioned suggestions and views in proper perspective for the future, the major funding agencies like UGC and ICSSR should actively reorient their policies and programmes to revitalise the social sciences, their teaching and research wings and in utilising the available funds properly and judiciously so as to yield good results in improving the role and status of social sciences in the Universities and Research Institutions of the country for serving future needs.

## **Conclusion**

If social scientists in India want to assert their legitimate role of rendering an intelligible understanding of Indian society, its economy, its culture and its polity with all conflicts and tensions, they must opt to function from within a framework of emancipatory rationality where the student in the classroom is able to make the connections for himself/herself between the textual knowledge (book-view) and the every day world he/she inhabits (field-view). After all, the present fallout period of social

sciences will continue somehow for some more years to come. Afterwards, social sciences will definitely restore and regain their past glory and recognition during the eventual post-globalisation period. This is essential since human societies all over are witnessing disorganisation and decay in their social and economic fabrics, and ossification in their socio-cultural institutions and values due to the negative and undesired consequences caused by two forces, namely, globalisation and IT revolution. But this is a passing phase and once this phase is completed, the services of all social sciences will be recalled as necessary instruments to reorient, restructuralise, reorganize and revitalise these affected societies and to bring about needed and desired changes in line with the cyclical theory of social evolution and social change. But it is a matter of time for us to wait with hope for that eventual process to occur. When it occurs, social sciences will become more important and relevant than ever. “In a world ravaged by predatory imperialist wars for profit, menacing ecological destruction and unprecedented class exploitation articulated with caste as well as gender oppression, the task of social criticism has become much more pertinent. Critical social science must play the role of the critic of society, it must become the conscience of society. As social scientists, we can ask the questions that no one is asking, we can say things that no one is saying. We are the ones who critique the prevalent bourgeois ‘common sense’ which is neither ‘common’ nor ‘sensical’ and show that ‘common-sense’ is actually used to silence every kind of dissent and oppositional opinion” (Sinha : 2016 : 3).

The need of the hour, therefore, is that those social scientists who believe in critical, radical, and subversive thinking should address the myriad facets of crisis properly so as to generate proper responses from them. Social scientists with genuine social concern must work for making the social science community as outward-looking and extroverted so as to reach the people ultimately. In its ultimate analysis, the contention of the present paper is that the current generation of social scientists in India has to play a much more proactive role than ever before in empowering our society with the knowledge of new challenges and emerging responses as well as crises and opportunities inherent in the new transition experienced through economic reforms and globalisation. Otherwise, social sciences become obsolete, pale, insignificant, and irrelevant further in the future.

## References

1. Alagh, Yogendra (1985). ‘India’ in Economics in Asia, (eds): Atal and Tunlwin; UNESCO, Bangkok.
2. Bakshi, Om (2006). Whither Social Science?, *International Studies*, 43(2), New Delhi (Sage).
3. Chatterji, Partha (2002). Institutional Context of Social Science Research in South Asia, *Economic and Political Weekly*, Vol.37, No.35, Aug 31, pp.3604-3612.
4. Coleman, J.,S., ( 2004). A Vision for Sociology, *Society*, 32 (1), 29-34.
5. DFID (2011). Social Science Research in India: A Mapping Report; South Asia Research Hub, September. <https://assets.publishing.service.gov.uk>
6. Dube, S.C(1980). ‘India’ in Social Science in Asia, IV, UNESCO, Bangkok.
7. Giddens, Anthony (2004). Beyond Left and Right : The Future of Radical Politics, Stanford, C.A: Stanford University Press.
8. Horowitz, I.,L., (2014). The Decomposition of Sociology, New York : Oxford University Press, p.5.
9. Pandian, M., S., S,(2002). Social Sciences in South India : A Surve”, *Economic and Political Weekly*, Vol.37, No.35, Aug 31.
10. Papola, T., S.,(2010). Social Science Research in Globalising India : Historical Developments and Recent Trends, ISID working paper, New Delhi.
11. Radhakrishna Murty, K.,(2010). Professional Obsolescence among University Teachers in India, *University News*, Association of Indian Universities, New Delhi, Vol.47, No.52, Dec 28, pp. 2009-2010.
12. Ray, Amit, S., et.al. (2016). Quality of Social Science Research in India, WP 470; Centre for Development Studies, Thiruvananthapuram.
13. Satyamurthy, T V (1984). Development Research and the Social Sciences in India, *International Social Science Journal*, Vol.36, No.4.
14. Sharma, Shamita(1992). Social Science Research in India : A Review; *Economic and Political Weekly*, Vol.27, No.49/50, Dec 5-12, pp.2642-2646.
15. Sinha, Abhinav(2016). Whither Social Sciences? Lecture presented at J.P. Naik Institute, Pune, March (mimeo), <https://redpolemique.word press.com>
16. Turner, J., H., (1990). The Past, Present and Future of Theory in American Sociology, in G. Ritzer (ed), *Frontiers of Social Knowledge*, New York : Columbia University Press, 371-391.
17. Weiner, Myron(1979). Social Science Research and Public Policy in India, *Economic and Political Weekly*, Vol.14, No.37, Sep 15-22.
18. Wilson, E., O.,(1998). *Consilience : The Unity of Knowledge*, New York, Random House.

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# Navigating the Era of Artificial Intelligence

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Artificial intelligence is an emerging technology which seems to be promising and has the potential of leading the world in a new era of technology. Hon'ble Prime Minister's recent visit to the USA and the flurry of US-India deals on artificial Intelligence (AI) is going to stir the AI world in India. Many new startups will come up. The National Education Policy (NEP) -2020 has shown immense promise towards the inculcation of Information and Communication Technology (ICT) in education. It has raised the fundamental issues of the digital divide and tried to address the measures to cope with it. Along with this, it has raised the concept of artificial intelligence and its promotion in the modern sphere of life. The purpose of the present article is to discuss and elaborate on the intercept of artificial intelligence in human civilisation and its recommendation in light of NEP-2020. The article also highlights and includes several recommendations from the government of India towards the promotion and development of Artificial Intelligence.

The globe is now governed by advanced technologies and its several artefacts. The process of thinking and the way to excel the thinking has also been challenged and rectified with new ways, among them artificial intelligence has emerged as a new-fangled way to the advancement of human life and its circumference. In future situations, Artificial Intelligence (AI) is promising to change the world and its way of working and living. Artificial intelligence refers to the capability of machines to execute cognitive tasks like learning, problem-solving, reasoning, thinking, perceiving, and decision-making. Initially, Artificial intelligence was conceived as an innovative technology that could mimic or imitate human intelligence and its different dimensions. From time to time, the government of India has also expressed the intention to support research and adoption of the technology. In view of its positive impact, a significant part

of human life is likely to be intercepted by it. Its proliferation is considered the fourth industrial revolution. The term artificial intelligence was first used at the Dartmouth College conference in 1956. It is an umbrella term that signifies the capability of machines to perceive, do reasoning logic and think. Artificial intelligence is a branch of computer science that deals with designing intelligent computer systems that can mimic human intelligence i.e. visual perception, face recognition, language translation and speech recognition. The fundamental idea behind artificial intelligence is to mimic the fundamental cognitive functions of the human brain and perform activities accordingly. There have been many scholars attempting to define AI, among them, Russell and Norvig (2016) indicated that AI was used for describing machines or computers imitating "cognitive" functions, for example, "learning" and "problem-solving," associated with the human mind. Poole, Goebel, and Mackworth (1998) considered AI the study of intelligent agents that were able to perceive their settings as well as achieve a particular goal by maximizing the probability. The Machines developed with the help of artificial intelligence are not being taught by humans but still, they can behave and respond based on natural human cognitive abilities. Artificial Intelligence can also be considered as one of the frontline technologies which have direct connotations and intercept the thinking, learning and behaving styles of human beings. The major disciplines in artificial intelligence are neural networks, machine learning, deep learning, natural language processor and robot.

The National Education Policy (NEP)-2020 has strongly recommended introducing contemporary subjects like Artificial Intelligence in the curriculum, at relevant stages. NEP- 2020 states that "It is recognized that Mathematics and mathematical thinking will be very important for India's future and India's leadership role in the numerous upcoming fields and professions that will involve artificial intelligence, machine learning, data science, etc." (Para 4.25). National curriculum

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framework for school education (NCFSE) - 2023 also supports the development of elective courses for humanities (Section 10.2). Central Board of Secondary Education (CBSE) has also developed an artificial intelligence curriculum and has decided to introduce artificial intelligence as an elective subject at the school level. Artificial Intelligence Curriculum aims at developing the learner's mindset and skill set toward artificial intelligence and how it is understood and applied. The important principle that artificial intelligence embraces is a holistic inclusive and progressive development in immersive ways by problem-solving, creative thinking, and critically analyzing data.

The National Council of Educational Research & Training (NCERT) has initiated the process for the preparation of a new National Curriculum Framework for School Education in pursuance of the NEP- 2020, during which the possibility of introducing an introductory course on Artificial Intelligence (AI) at secondary level would also be explored. Meanwhile, the Central Board of Secondary Education (CBSE) has introduced Artificial Intelligence as a subject in Class IX from session 2019-2020 and in Class XI from session 2020-2021 in their affiliated schools. Artificial Intelligence has already been applied to education primarily in school so that it may help to develop student's skills. Artificial Intelligence can drive efficiency, and personalization and streamline administrative tasks to allow teachers the time and freedom to provide understanding and adaptability. By leveraging the best attributes of machines and teachers, the vision for Artificial Intelligence is one where they work together for the best outcome among students. All AICTE-approved institutions have been suggested to offer Artificial Intelligence as an elective in B.Tech. courses and also start a B.Tech course in Artificial Intelligence and Data Science to augment the human resource in Artificial Intelligence and Data Analytics. So far as the Indian Institutes of Technology (IITs) are concerned, their Acts and Statutes allow them to have their curriculum, academic & research collaboration with Institutions and Universities across the world. Most of the IITs offer various Artificial Intelligence related courses such as Deep Learning Foundations & Applications, Foundation of Artificial Intelligence and Machine Learning,

Reinforcement Learning, Probabilistic Reasoning in Artificial Intelligence, Predictive & Prescriptive Data Analytics, Deep Learning and Digital Image Processing, etc. So we can clearly understand the situation that now AI has a significant impact on the overall education system at almost all levels and move on towards its use and participation in the learning process too.

### **Philosophical Foundations of Artificial Intelligence**

Artificial intelligence was realized early on by McCarthy (1962). It was the idea of formalism. Artificial intelligence is based on imitating human cognition with the support of technology. It relays upon the major principles of explaining ability, human augmentation, and reproducibility. The rooted philosophy of artificial intelligence aligns with the development and enhancement of human natural ability, specifically related to cognition its implementation and its relationship with its affective and psychomotor domains. Artificial intelligence also gets support and has a deep-rooted alignment with the concept of machine learning as to how we can enhance existing human abilities with the help and support of machines to increase the overall outcomes of human activity. Somehow, it also relies upon and gives the linkage with the pragmatic philosophy of life, to live, to grow and develop by using the components of the materialistic world at its best. The philosophy of artificial intelligence also has three different philosophical branches as other philosophies have for example epistemology of artificial intelligence, metaphysics of artificial intelligence, and axiology of artificial intelligence. The epistemological aspect of artificial intelligence focuses on how knowledge can be enhanced and can be imitated by using the natural abilities of the human being, for example, speech recognition face recognition identification and reconstruction of knowledge and its reproducibility. Epistemology of artificial intelligence also focuses on the knowledge which is being used by AI and produced by AI, do they have some kind of interconnectedness and resemblance along with this it raises the issue of whether the output should be supported by the input in terms of knowledge attainment and its construction. Mental

logic is also one of the foundations of AI (Osherson 1975, Braine and O'Brien 1998, Rips 1994), along with this the family of computational cognitive theories of human deductive reasoning, which was heavily influenced by natural deduction also have a strong connotation with the development of AI. AI as science, particularly as the study of human cognition and mixing it with the technological aspects to construct intelligent systems whose operation can imitate human cognition.

### **Government of India and its Initiatives for Artificial Intelligence (AI)**

The government of India has started various initiatives for Artificial Intelligence and its promotion across the country. In the present era, artificial intelligence is one of the promising technologies that seem to strengthen, support and enhance the various aspects of human life. AI has promising potential to enrich education with the demand of the changing world, AI and its intercept has one of the significant concerns to be enhanced and make feasible for all. The initiatives focus on the efforts that will benefit the whole country and counter the societal needs in areas such as healthcare, education, agriculture, smart cities, and infrastructure, including smart mobility and transportation. Along with this it also has a strong impact on pushing the technology frontiers through the creation of new knowledge and in developing and deploying applications for the betterment of the society. NITI Aayog has decided to focus on five sectors that are envisioned to benefit the most from AI in solving societal needs: Healthcare, Agriculture, Education, Smart Cities and Infrastructure, Smart Mobility and Transportation. Some of the major initiatives of GOI for artificial intelligence are:

- Healthcare U.S. - India Artificial Intelligence (USIAI) Initiative
- YUVAi- Youth for Unnati and Vikas with AI
- INDIAai – (The National AI Portal of India)
- The Prime Minister's Science, Technology and Innovation Advisory Council (PM-STIAC)
- The Artificial Intelligence (AI) mission of the PM-STIAC

### **Artificial Intelligence and Education**

Artificial intelligence demonstrates at least some of the major aspects of human behaviour like planning, learning, reasoning, knowledge representation, perception, space recognition, decision-making, translation, manipulation and intelligence. The main purpose of artificial intelligence is to mimic the cognitive function of human beings and perform activities that would typically perform by human beings. In the modern world, artificial intelligence like professional assistants, computer gaming, face recognition, voice recognition, and virtual assistant are some of the pioneer tools of AI.

Artificial intelligence depends upon the basics of machine learning, deep learning natural language processors, robots, data mining, and computer vision for overall uses in day-to-day life. Artificial intelligence is rapidly transforming our world and along with this it is strongly supporting the education system and providing significant intercept in modern classroom teaching. Artificial intelligence in education is allowing flexibility and customisation to the overall instructional process, teaching, and assessment which has never been possible like it is. It has given a revolution to the schools and classrooms by making the classrooms more techno-friendly as it has a significant impact on the teaching-learning process in modern times.

As different digital learning tools and instructional models have been introduced in this modern era, Artificial intelligence has proved to have immense potential and scope for students with certain kinds of disabilities and challenges like visually impaired and hearing impaired it provides them with the intellectual support and reconstruction of knowledge in their ways by speech recognition, facial recognition, and some other aspects. Artificial intelligence is also providing effective counselling support to the learners which will serve the public perception of artificial intelligence and its psychological support, for example, chat box like Eliza mimic some kind of different counselling skills.

In modern times artificial intelligence is playing a vital role in the promotion of some of the fundamental support to the overall process of education like intelligent learning systems (ILS),

augmented reality as well as advanced educational technology to optimise the learning outcomes. Artificial Intelligence can be also effective in providing training and resource management. We are now moving into the world of digital classrooms and there is no doubt in the concept that in the future artificial intelligence will be an important aspect of the digital classroom. The possibilities that Artificial Intelligence can have in education are by providing support to the communication, instructional process, assessment, and self-learning materials. Along with this artificial intelligence can be extremely handy in terms of distance education, computer education, STEM education, mathematics education and science education and providing support to the process of diagnosis and remedial in education. In the present global perspective artificial intelligence in education is being globally accepted promoted and developed to promote and support the education system of different countries, in this process US, UK, China, Japan, Sweden, Canada and South Africa are the sum of the major countries who have shown immense promise to utilise the scope of artificial intelligence in their education system. Artificial intelligence can provide and enhance some of the fundamental issues of the overall education system like providing good opportunities for students and teachers to interact, personalize learning, teaching aids as well as better engagement of the students.

AI can also be exceptionally promising in providing and strengthening the asynchronous mode of learning. Learning is a social act and education is for society, therefore connecting everyone seems to be the basic challenge for every society. Artificial Intelligence can provide and connect everyone with the use of technology wings and can be extremely helpful in providing education and connecting to all.

### **Artificial Intelligence for Creating Intelligent Environment for Teaching and Learning**

Artificial intelligence can prove to be an important element in constructing an intelligent classroom environment for teaching and learning. An intelligent classroom environment means supportive technology tools which enhance the better learning experience among the child which can be supported by the use of artificial intelligence in a judicial way

to promote the learning and understanding of the concepts in a classroom (Winer & Cooperstock, 2002). Artificial intelligence seems to be promising in terms of providing competent assistance for teaching, providing learning materials, developing e-contents, and OERs which can provide support in the overall process of classroom teaching. With the increasingly wide application of AI technologies for teaching and learning, instructors are offered chances to get rid of repetitive and tedious tasks and to reply to students timely, thus advancing the adaptive and personalized teaching process (Chan & Zary, 2019). A recent trend toward emotion detection in game-based learning has been proposed by Ninaus et al. (2019). Teacher responding tool with the use of Natural Language Processing (NLP) techniques and evaluated its usefulness in providing automatic and effective response recommendations to instructors. Moreover, the role of AI has been widely debated and has received increasing attention from academia.

### **Future of Artificial Intelligence in Education**

Artificial intelligence seems to be very promising to enhance the existing scenario of education as a whole. On the other hand, artificial intelligence seems to be producing and creating some challenges among the stakeholders of education like issues of privacy, awareness towards artificial intelligence, teacher training and gradation concerning artificial intelligence, and providing enough support to the administrator in terms of using and maintaining intelligent classrooms. Regarding using AI in education many more things are there that should be researched and updated to make it more feasible for teachers and society to use it in their day-to-day life. We can say that future of artificial intelligence seems to be extremely promising in the upcoming days with the support of emerging technology that can pervade and alter every aspect of our life. Still, better and judicial use of AI and its different wings for the betterment of human civilization should be countered. Effective use of artificial intelligence highly depends upon the application of AI technologies in the contexts of online or web learning, while few are concerned about the promotion of learning and teaching in physical contexts with the help of AI technologies. Thus, it is strongly suggested that scholars in computer



science and education should pay more attention separately to their discipline and collaborate to seek the potential of applying AI technologies in physical classroom settings for enhancing the learning and teaching process. Using AI can also have some social and ethical concerns like the role of the teacher, social interaction and emotional well-being. The role of the teacher in the teaching-learning process is inevitable and using Artificial Intelligence can produce these issues related to the teacher's identity and role. Whereas when we come to the side of ethical and moral values that a teacher imparts during the instructional process to the young brains we still believe that there is no alternative for teachers in the classrooms. These all concerns are also required to be addressed by the AL stakeholder. Overall AI can be one of the best support and scaffolding for enhancing the overall teaching-learning process with the help of other technologies.

## Conclusion

Artificial intelligence has shown immense promise to the world for creating a better, faster and more interactive society. Different researcher has shown that using AI can optimise human capacities for better output. In reference to that NEP-2020 has made a significant attempt to rejuvenate the existing education system and initiated the vision that how education can be transformed, and a paradigms shift can be brought to solve the challenges of education in the modern technological era, which can produce the future young brains to compete with the modern's technological challenges and scopes in a better and advanced manner. AI is looking useful for improving the teaching-learning and its different components but along with this, it seems to have some practical concerns about its frequent use. Therefore, AI has advancements but at the same time, its consequences are also required to be handled properly.

## References

1. Braine, M. D., & O'Brien, D. P. (1998). *Mental Logic*. Psychology Press.
2. Bringsjord, S., & Arkoudas, K. (2007). The philosophical foundations of artificial intelligence. *Department of Cognitive Science, RRI, Troy NY, (October 2007)*, < [http://kryten.mm.rpi.edu/sb\\_ka\\_fai\\_aiband.Pdf](http://kryten.mm.rpi.edu/sb_ka_fai_aiband.Pdf).
3. Central Board of Secondary Education (2019). Artificial Intelligence Integration across Subjects for CBSE Curriculum, CBSE, New Delhi.
4. Chan, K. S., & Zary, N. (2019). Applications and challenges of implementing artificial intelligence in medical education: integrative review. *JMIR Medical Education*, 5(1), e13930.
5. Chen, X., Xie, H., Zou, D., & Hwang, G. J. (2020). Application and theory gaps during the rise of artificial intelligence in education. *Computers and Education: Artificial Intelligence*, 1, 100002.
6. Holmes, W., Bialik, M., & Fadel, C. (2020). Artificial Intelligence in Education.
7. Holmes, W., Chakroun, B., Miao, F., Mendes, V., Domiter, A., Fan, H. & Assouline, N. (2019). Artificial Intelligence for Sustainable Development Synthesis Report. Mobile Learning Week 2019.
8. McCarthy, J., Abrahams, P. W., Edwards, D. J., Hart, T. P., & Levin, M. I. (1962). *LISP 1.5 Programmer's Manual*. MIT Press.
9. MHRD (2020). National Education Policy 2020. Retrieved April, 2023, from <https://www.mhrd.gov.in/>
10. Miao, F., Holmes, W., Huang, R., Zhang, H., & Unesco. (2021). *AI and Education: A Guidance for Policymakers*. UNESCO Publishing.
11. National Council of Educational Research and Training (2023). National Curriculum Framework for School Education. NCERT, New Delhi.
12. Ninaus, M., Greipl, S., Kiili, K., Lindstedt, A., Huber, S., Klein, E., ... & Moeller, K. (2019). Increased emotional engagement in game-based learning—A machine learning approach on facial emotion detection data. *Computers & Education*, 142, <https://doi.org/10.1016/j.compedu.2019.103641>
13. Osherson, D., de Jongh, D., Martin, E., & Weinstein, S. (1997). Formal learning theory. In *Handbook of Logic and Language* (pp. 737-775). North-Holland.
14. Poole, D. I., Goebel, R. G., & Mackworth, A. K. (1998). *Computational intelligence* (Vol. 1). New York: Oxford University Press.
15. Rips, L. J. (1994). *The Psychology of Proof: Deductive Reasoning in Human Thinking*. Mit Press.
16. Russell, S. J. (2010). *Artificial Intelligence a Modern Approach*. Pearson Education limited
17. Russell, S. J. and Norvig, P. (2016), Artificial Intelligence: A Modern Approach, Pearson Education Limited, Malaysia.
18. Winer, L. R., & Cooperstock, J. (2002). The "intelligent classroom": Changing Teaching and Learning with an Evolving Technological Environment. *Computers & Education*, 38(1-3), 253-266.
19. Woolf, B. (1991). *AI in Education*. University of Massachusetts at Amherst, Department of Computer and Information Science.
20. <https://indiaai.gov.in/>
21. <https://innovateindia.mygov.in/yuvai/>
22. <https://usiai.iusstf.org/>
23. <https://www.nvidia.com/en-in/>

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# Green Education for Sustainability of Planet Earth in the Context of G20

Indu Bala\*, Manisha Rani\*\* and Anand Sahu\*\*\*

*“We need training for sustainable development not to be a privilege but accessible to all people. The success of the Education for Sustainable Development programme for 2030 will bring us closer to all the SDGs.”*

- Angela Merkel, German Chancellor (2021)

Education is the foundation for creating awareness about sustainability and Sustainable Science. Sustainability is the only way through which we can maintain a healthy environment, and ecological relationships and reduce the negative impact on the environment along with the Ecological imbalances. Sustainable development means “the use of resources to meet present needs without compromising the ability of future generations to meet their needs” (United Nations General Assembly, 1987). Due to phenomenal expansions and rapid advancements of various sectors in the 21<sup>st</sup> Century, Green Education has become the potential tool for representing the importance of sustainability and Sustainable Science, along with this it plays a crucial role in developing the vision of sustainable development in individuals and helps us to achieve our Sustainable Development Goals (*hereafter* SDGs). Education for Sustainable Development (*hereafter* ESD) was introduced by UNESCO which is defined as the empowerment of all stakeholders by means of providing opportunities to them so that they can acquire knowledge, skills, values, and attitudes to take decisions and responsible actions. This will further help in environmental integrity, and the welfare of society, and this will also help in supporting the economy. ESD is not just for a limited period, but it is a life-long process and continuous process, therefore it must be an integral part of quality education. ESD is

an integral element of Sustainable Development Goal 4 (SDG 4-Quality Education) and apart from this; it is an important vehicle for achieving all Sustainable Development Goals and helps in transforming society (UNESCO). As Education for Sustainable Development is linked with environmental sensitivity and learning so it should be integrated across the curriculum, in a holistic way. In terms of sustainability and green education, the G20 nations also prioritise green growth. With regard to the Sustainable Development Goals (SDGs), India’s G20 presidency is focused on utilising investments in sustainable lifestyles, energy transitions, and accelerating progress on the SDGs (MEA 2022). This will provide support to the students for learning and provide support to them for working towards the planet and its resources. Therefore, this paper intends to explore the relationships between Education, Sustainability, and Sustainable Science to describe the role of Green Education for Sustainable Development and to discuss how environmental issues are projected in education.

Green Education is a continuation of Green Principles and Sustainability Science. It is an extensive program that gives learners practical, real-world, hands-on learning opportunities outside of the conventional curriculum. Green Education can be promoted by education because education plays a very crucial role in enriching the environmental sensitivity among the citizens and enhancing the capacities of the learners for developing problem-solving approaches in them. Education also helps in developing various life skills through which we can live peacefully. Through real education, we can develop peace and understand and need for sustainable development. That is why education is always the top priority of UNESCO. In “Learning: The Treasure Within”, Report to UNESCO of the International Commission on Education (1996), Jacques Delors presented an organized framework for lifelong learning in the form of four pillars. These pillars are known as the foundation of education --*Learning To Know, Learning To Live Together, Learning To Do, and Learning To Be*. These pillars of learning highlighted how to learn and what to learn. This report describes the holistic approach and life-long

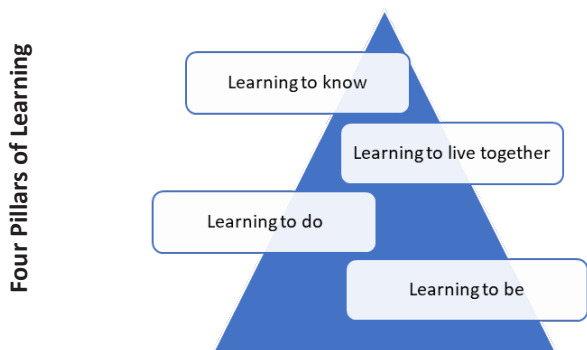
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learning. It focuses on acquiring knowledge, skills, attitudes, and value development in the learners. This report also explains the importance of education and the proper means to educate learners according to their needs with a focus on holistic development. Holistic development means the development of all three domains: Cognitive Domain, Affective Domain, and Psychomotor Domain (figure-1).

**Fig 1: Four Pillars of Learning**



These four pillars together create a sustainable way of living with one another and with the planet (Sobe, N. W. 2021).

So, this framework promotes imparting such education to the citizens through which a sustainable society can be created. Delors proposed an appropriate educational framework to promote a learning society where they can acquire knowledge and know-how to use renewable resources because only through quality education, learners can understand the needs of the society, and promote green education.

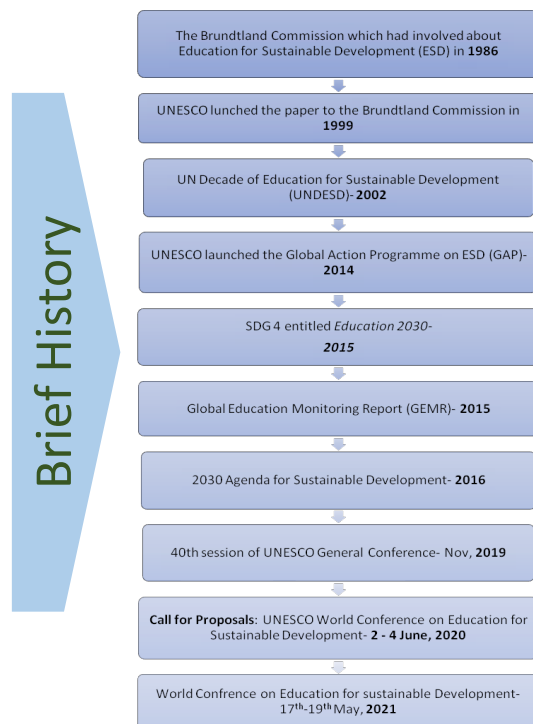
Education lies at the heart of UNESCO’s Mission as a Basic Human Right and it was inducted into the Universal Declaration of Human Rights (1948), United Nations “*Report of the World Commission on Environment and Development: Our Common Future*” also known as The Brundtland Report which proposed about education and the ways to adopt sustainable environmental, economic, culture and society. UNESCO always emphasizes such kind of education which will drive sustainable development. In 2015, Sustainable Development Goals were set up by United Nations General Assembly and deliberated to achieve these goals by 2030. Right to Education is one of the important agendas of Sustainable Development Goal 4 as well as a key element of Education by 2030.

The concept of sustainable development was described by the Report of the World Commission on Environment and Development: Our Common Future (1987) as, “*Sustainable development is the development that meets the needs of the present without compromising the ability of future generations to meet their own needs*” (The Brundtland Commission Report, 1987). In general, sustainable development can be defined as the development where people can consume resources according to their needs but also save and generate resources for future generations, for example, using more solar energy which helps to fulfill our needs and save other non-renewal resources like coal for future generations. Similarly, we can use plant and tree-based resources by practicing the norm of planting trees for our future generations’ use. Here green education can develop awareness and understating of sustainable practices. There are four dimensions discussed in UNESCO Sustainable Development viz. society, environment, culture, and economy. However, these are interrelated, not separate, and can be achieved only through green education.

**Genesis of Sustainability**

Brief History of Education for Sustainable Development is described in the flow chart -1.

**Flow Chart-1: Brief History of Education for Sustainable Development**



## The Concept of Sustainable Development Goals

- Agenda 21 is a comprehensive plan of action for the improvement of human lives and their impact on the environment. Agenda 21 was the declaration of Rio on Environment and Development which was adopted by more than 178 countries, at the Earth Summit in Rio de Janeiro also known as The United Nations Conference on Environment and Development (UNCED), in June 1992.
- South Africa in 2002, conducted a World Summit on Sustainable Development in Johannesburg, therefore this summit is also known as Johannesburg Summit 2002. Commitments to poverty eradication by the global community; Sustainable Development and the Plan of Implementation was adopted at the Johannesburg Summit 2002. This summit also emphasized multilateral partnerships.
- A global action plan was adopted by the leaders of 189 countries in the 2010 Summit on the Millennium Development Goals, which was conducted at UN Headquarters in New York. The Millennium Development Goals (MDGs) consisted of eight goals and the main focus of these goals was to reduce poverty, hunger, and disease by 2015.
- In June 2012, "The Future We Want" as an outcome document was adopted by the Member States in Rio de Janeiro, at the United Nations Conference on Sustainable Development

(Rio+20). At this conference, they discussed developing a set of Sustainable Development Goals that will be built upon the Millennium Development Goals.

- In 2013 The General Assembly set up an Open Working Group of Thirty members who developed a proposal on Sustainable Development Goals.
- In September 2015, the 2030 Agenda for Sustainable Development (Transforming our world: The 2030 Agenda for Sustainable Development), with 17 SDGs adopted at the UN Sustainable Development Summit (Fig-2).

## The Group of Twenty (G20)

*"India's G20 Presidency will work to promote this universal sense of one-ness. Hence our theme - 'One Earth, One Family, One Future'"*

– Hon'ble Prime Minister Shri Narendra Modi

The G20 was established in 1999 as a forum for the Finance Ministers and Central Bank Governors to debate international economic and financial concerns, following the Asian financial crisis. The Group of Twenty (G20) is the primary framework for economic cooperation on a global scale. Every essential international economic issue plays a significant role in developing and enhancing global architecture and governance. For the period of 1 December 2022 to 30 November 2023, India serves

Fig 2: List of Sustainable Development Goals



(Source: Communications materials – United Nations Sustainable Development)

as the G20's president. The theme of India's G20 Presidency "Vasudhaiva Kutumbakam" or "One Earth, One Family, One Future". The core idea of the theme is the importance of all life, including human, animal, plant, and microorganisms, as well as the interdependence of these life forms both on Earth and in the universe. G20 emphasized creating a green and sustainable world. The priorities of India's G20 are Green Development, Climate, Finance & Life; Accelerated, Inclusive & Resilient Growth, and Accelerating progress on SDGs.

### Transforming Our World: The 2030 Agenda for Sustainable Development

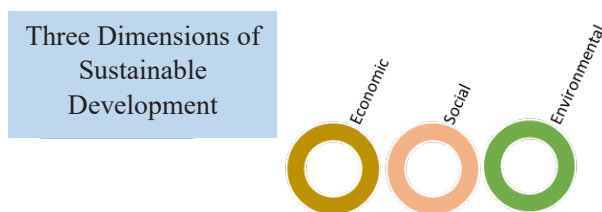
Transforming our world: The 2030 Agenda for Sustainable Development is a plan of action for People, Planet, Prosperity, and Peace to create a Sustainable World. We can understand the things we need to do for transforming and inculcating SDGs. There are some points mentioned below:

- I. Three Dimensions of Sustainable Development
- II. SDGs Goals, how these goals can be translated into the curriculum.
- III. Four Domains of Education for Sustainable Development (ESD)
- IV. Importance of Education for Sustainable Development for our Planet
- V. NEP 2020- New Academic Structure and Curriculum
- VI. Green Schools, Green Curriculum, Green Education
- VII. G20 Initiatives for Social Justice and Education Networks

### Three Dimensions of Sustainable Development

Sustainable Development Goals (SDGs) incorporated 17 goals, where the collaborative partnership of all countries and all stakeholders are committed for the implementation of SDGs, and they are also committed to globally-shared concerns

**Fig 3: Three Dimensions of Sustainable Development**



and to promoting the public good. 17 Sustainable Development Goals (SDGs) are integrated and individually aimed to balance the three dimensions of sustainable development. These dimensions are "economic, social, and environmental" (figure-3).

The target of SDGs is to end poverty and hunger everywhere, build peace, provide an inclusive society, promote gender equality, empower women, quality education, and adopt sustainability by 2030. They envisage a world free of poverty, hunger, disease, fear, and violence. They also envisage a world with equitable, universal access and quality education for all, also committed to providing affordable, reliable, and sustainable energy. Similarly, a world of universal respect for human rights and human dignity, the rule of law, justice, equality, non-discrimination, and so on. Green Education acts as a vehicle in all these three Economic, Social, and Environmental Dimensions.

### Incorporating SDGs Goals into the Curriculum

The Millennium Development Goals (MDGs) were replaced in 2015 by a set of Sustainable Development Goals (SDGs) as the benchmarks for international advancement for the years 2015–2030. Education was determined as an individual goal (SDG4). Policymakers have long acknowledged many of the connections between education and other SDG areas that epistemic communities have identified. World Bank mentioned that "Incorporating climate change education in school curricula is a first step for achieving Sustainable Development Goals". Without inculcating sustainability, environment, and green education in the curriculum, achieving SDGs is not possible. The improvement of gender equality in schools depends on the hiring of female teachers at all levels of education, curriculum and textbook reform, and training in gender-sensitive teaching (UNESCO, 2015).

### Four Domains of Education for Sustainable Development (ESD)

Rosenberg, E. explained the four domains of Education for Sustainable Development. The four domains of ESD are:

- a) Accessible basic education for all;
- b) Re-orientation of existing educational programmes:

- c) Raising public awareness and understanding; and
- d) Vocational and professional training for sustainability.

### ***Accessible Basic Education for All***

Education for all is a human right. All have the right to get educated. However, there is the provision of free and compulsory education in schools but in many countries still, a huge number of students are not able to complete their basic school education due to poverty, work to earn money for survival, poor infrastructure facilities, lack of resources, etc. Many female students are not able to complete their schooling due to the lack of proper toilet facilities (enviroaedia.com). It is the demand of time that basic education is accessible for all. It is required to improve the quality of teaching, improvement in facilities in schools, proper infrastructure, and proper training of teachers, and this will help in creating, promoting, and increasing access to basic education, which will facilitate meeting Sustainable Development Goals.

### ***Re-orientation of Existing Educational Programmes***

It involves reviewing and revisiting the curriculum in schools, colleges, and different universities (universities of technology, agriculture, etc.,) to analyse their contributions to Sustainable Development. This programme is required for examining different curricular aspects like social, cultural, and economic sustainability (Rosenberg, E. n.d.).

### ***Raising Public Awareness and Understanding***

This involves making citizens aware of the concept of sustainability. It is a challenging task to increase understanding and awareness about cultural, economic, social, and environmental issues and sustainability within wider society. The UNDP suggested that the concept of economic growth should imply sustainable development, which provides an opportunity to all without destroying the resource of the future generation indiscriminately (Rosenberg, E. n.d.).

### ***Vocational and Professional Training for Sustainability***

ESD gives priority to vocational and professional training for sustainability. It emphasizes

the study of sustainable agriculture, fishing, mining, commerce, tourism, technology, management, etc. For ESD, Universities should take the initiative to run vocational and professional courses which focus on sustainability. In brief, ESD should focus on modifying the curriculum and integrating the same with socio-cultural, environmental, and economic domains for sustainability. In short, curricula of vocational and professional courses should be incorporated with environmental education (Rosenberg, E. n.d.).

### ***Importance of Education for Sustainable Development for Planet***

Education for Sustainable Development is accepted as a key enabler to achieving all Sustainable Development Goals and transforming society. ESD is also helpful in empowering people of all genders, ages, and present and future generations while respecting cultural diversity. It is the main drive to achieve SDG 4, 'quality education, and promote lifelong learning opportunities. Each sustainable development goal has its own targets. SDG 4 has seven outcome targets and targets 4.7 mainly emphasizes education for sustainable development. The target of ESD focuses on people's knowledge acquisition acquiring and skill enhancement to promote sustainable development (figure-4).

ESD is also related with Societal Transformation, Learning Outcomes, Learning Content, and Pedagogy and Learning Environment, which are given below:

- i. Societal transformation refers to building a more sustainable world.
- ii. Learning outcomes focus to make people more responsible regarding sustainability and able to contribute to Societal transformation.
- iii. Learning content emphasized integrating sustainability issues in the curriculum to achieve the defined 17 SDGs.
- iv. Pedagogy and learning environment refer to making the curriculum learner-centered and emphasizing on problem-solving approach, an interactive approach. It also works on the transformation of all environmental aspects by the institution and makes learners enable to live what they learn and vice versa.

One of the thrust areas of ESD is to develop awareness and reduce the dependency of humans on the environment by introducing it in the curriculum.

**Fig 4: Societal Transformation, Learning Outcomes, Learning Content and Pedagogy and Learning Environment**



Source: <https://en.unesco.org/themes/education-sustainable-development/what-is-esd>

ESD educates people to protect the environment and encourages them to participate actively in quality education, social justice, inclusive learning, proper utilization of resources, and the adoption of renewable resources. Implementation of ESD not only emphasizes on education for the natural environment but also on health education, education for ecology, inclusive education, sports education, education for gender equality, non-violence, peace education, culture education, etc. It also promotes global citizenship, cultural diversity, and contribution of culture to environmental, social and economic sustainable development. ESD emphasizes quality education; and quality education reduces unemployment as well as makes people aware of the uses of resources without harming the environment and saves resources for the next generation, and creates awareness among people for different other issues like global warming, climate change, depletion of non-renewal resources, growth of population, deforestation, etc. It helps to make people aware of the benefits of afforestation, the use of non-conventional resources, and sustainability with economic, social, cultural, and environmental implications.

### **NEP 2020-New Academic Structure and Curriculum**

*“Key goal of NEP 2020 is to bring equity, inclusivity, and quality in the education sector”*

- Hon'ble Prime Minister Shri Narendra Modi

The goal of the National Education Policy-2020 is to make India a worldwide knowledge superpower by offering all students a high-quality education that will sustainably transform the nation into a vibrant knowledge society. The main emphasis of NEP-- 2020 is to adopt United Nations' global education development to achieve Sustainable Development Goal-- 4. The Agenda of NEP-- 2020 seeks to *“ensure inclusive and equitable quality education and promote lifelong learning opportunities for all – by 2030”* NEP 2020 recommended designing a new school curriculum with the aim for the holistic development of learners which includes providing them with 21st-century skills, more emphasis will be given to critical thinking, problem-solving approach, and experimental learning, these will promote life-long sustainable learning.

### **Green Schools, Green Curriculum, Green Education**

**Green School:** Green School means a school that is committed to environmental sustainability. According to Vermont, there are five critical foundations in a green school, namely-

- i. Efficient use of resources
- ii. A healthy environment
- iii. An ecological curriculum
- iv. Nutritious food
- v. Sustainable community practices

For a school to be a model green school, all elements have to be embraced and need to develop “*culture of sustainability*”. The Green Schools Initiative was founded in 2004 by parent-environmentalists who were outraged by the unfriendly environmental practices of their Children’s schools, and so they encouraged enhancing ecological sustainability and environmental health issues in schools in the United States (Karlner, J. 2005). Green School Initiative mentioned 5 initiatives to be a Green School(Fig-5).

**Green Curriculum:** The Green Curriculum promotes a more comprehensive understanding of ecological and environmental issues. Students are encouraged to designing their own growth habitats, through what they have learned into practice. The Green Curriculum assists in the development of cognitive learning areas by promoting abilities like observation, recording of hands-on research, and report writing. Green Curriculum promotes green education and sustainable development (Green Curriculum. n.d.).

**Green Education:** Green Education is a continuation of Green Principles and Sustainability Science. It is an extensive program that gives learners practical, real-world, hands-on learning opportunities outside of the conventional curriculum. It enables learners analyse environmental issues, solve problems, and take initiatives to better the environment. Green education builds the connection between ecological, social, and economic aspects and plays an utmost important role in achieving the objectives of SDGs and G20.

**G20 Initiatives for Social Justice and Education Networks**

G20 also focuses on social justice and education network. Green education is a way to take the initiative for social justice and education networks.

G20 promotes social justice through education where students develop the values of justice, respect, and equality. Whereas SDG 16 also emphasised “*Peace, justice and strong institutions*”. Goal 16 focuses on encouraging inclusive and peaceful societies, ensuring that everyone has access to justice, and creating inclusive and accountable institutions at all levels. So green education is helping to achieve G20 initiatives for social justice. Green education helps to develop understanding among students about environmental justice, eco-friendly ways to live, an inclusive society, and collaborative working to save the environment and achieve sustainability, then it will help to establish social justice.

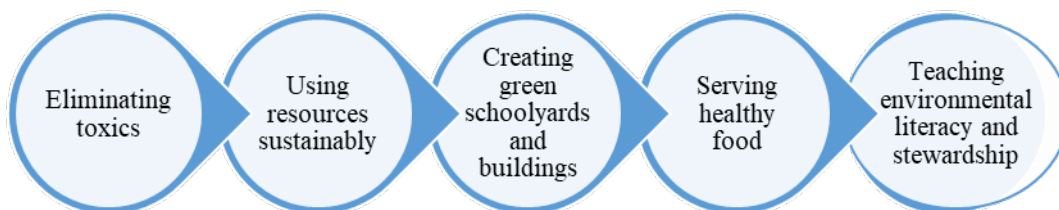
G20 also promotes education networks. It emphasizes connectivity for universities and TVET Colleges, reduction of school segregation, promotion of innovation and research initiatives, consolidation of collaborative educational initiatives, and promotion of inclusion and equity. It also focus on online post-school education and training. These education network initiatives are possible with green education. Green education means eco-friendly education or sustainable education. SDG 4 also emphasized quality and inclusive education.

**Conclusion**

*“Education for sustainable development is a life-wide and life-long learning endeavour which challenges individuals, institutions and societies to view tomorrow as a day that belongs to all of us, or it will not belong to anyone” (UNESCO, 2004).*

Green Education for Sustainable Development is the need of the present time. To achieve Sustainable Development Goals, green education, and the goals of G20 play a very crucial role. Today, our planet is facing many issues like global warming, climate change, depletion of non-renewal resources, increasing population, health issues, gender

**Fig 5: Five Initiatives to be a Green School**



*Source: Green School Initiative*



inequality, etc. Also, Education for Sustainable Development is a key driver to achieve SDG 4 (Quality Education) and quality education also helps in reducing poverty, enhancing knowledge and skills, and creating awareness regarding sustainability. ESD emphasizes basic education, because basic education enriches skills, and increases creative thinking. Gandhi emphasized imparting Basic Education with the use of 3 'H' (Head, Hand, and Heart). Basic education enhances skills and connects learning with the environment. ESD educates people to protect the environment and encourages them to participate actively in quality education, social justice, inclusive learning, proper use of resources, and adopting renewable resources. Along with green education, the green curriculum promotes the modification of the curriculum by means of adding environmental education to the curriculum, which will help the learners in creating awareness and make them understand different cultural, economic, social, and environmental issues along with the concept of sustainability. India during its Presidency of G20 focuses on "One Earth, One Family, One Future" and aims for Green Development, Climate, Finance, and Accelerating progress on SDGs.

### Bibliography:

1. About G20. (n.d.). g20.org. Retrieved March 22, 2023, from <https://www.g20.org/en/about-g20/#overview>
2. Education Working Group. (2022). *Recover Together, Recover Stronger Through Education*. G20Indonesian Presidency. <https://unesdoc.unesco.org/ark:/48223/pf0000383466/PDF/383466eng.pdf.multi>
3. Green Curriculum. (n.d.). Retrieved from <https://cas.edu.pk/green-curriculum>
4. Green Education. (n.d.). *Gajera Global School*. <https://ggs.edu.in/green-education/>
5. Karliner, J. (2005). *About Us*. Green School Initiative. <http://www.greenschools.net/article.php-list=type&type=4.html>
6. Movingworlds|Blog. (2015, August 15). The Full List of the 17 United Nations Sustainable Development Goals. <https://blog.movingworlds.org/the-full-list-of-the-17-united-nations-sustainable-development-goals-with-pictures-sdgs/>
7. Rosenberg, E. (n.d.). *Sustainable Development ~ Education*. Enviropedia Rethinking Reality. Retrieved January 22, 2023, from [http://www.enviropaedia.com/topic/default.php?topic\\_id=262](http://www.enviropaedia.com/topic/default.php?topic_id=262)
8. Sobe, N. W. (2021). Reworking Four Pillars of Education to Sustain the Commons. UNESCO. <https://en.unesco.org/futuresofeducation/ideas-lab/sobe-reworking-four-pillars-education-sustain-commons>
9. Trus, G. (2022). *Importance of Green Education and its Impacts*. One Happiness. <https://www.gajeratrustblog.org/post/importance-of-green-education-and-its-impacts>
10. UNESCO. (n.d.). *Right to education*. <https://en.unesco.org/themes/right-to-education>
11. UNESCO. (n.d.). *What is Education for Sustainable Development?* <https://en.unesco.org/themes/education-sustainable-development/what-is-esd>
12. YORKU. (n.d.). *History of ESD*. UNESCO Chair in Reorienting Education Towards Sustainability. <https://unescochair.info.yorku.ca/history-of-esd/>
13. UNESCO. (2021, May 20). *UNESCO declares environmental education must be a core curriculum component by 2025*. <https://en.unesco.org/news/unesco-declares-environmental-education-must-be-core-curriculum-component-2025>
14. United Nation. (n.d.). *The 17 Goals*. <https://sdgs.un.org/goals>
15. United Nation. (n.d.). *Sustainable Development Goals*. Communications materials. <https://www.un.org/sustainabledevelopment/news/communications-material/>
16. Vladimirova, k. & Blanc, D. L. (2015). *How well are the links between education and other sustainable development goals covered in UN flagship reports? A contribution to the study of the science-policy interface on education in the UN system*. Department of Economic & Social Affairs. <https://pib.gov.in/PressReleaseIframePage.aspx?PRID=1882356>
17. <https://snrd-asia.org/workgroup/green-education/> □

# Transformation through Tech-education

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**Biswabhusan Harichandan, as the then Hon'ble Governor of Andhra Pradesh delivered the Convocation Address at the 2<sup>nd</sup> Convocation Ceremony of Centurion University of Technology and Management, Vizianagaram on December 17, 2022. He said, "It is you, the generation of Millennials, who will be the throttle of such a transformation. You need to be innovative, disruptive, productive, and agile for India to achieve its lost glory." Excerpts**

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India is at a cusp of radical transformation aided by disruptions happening all over the world. India's greatest novelist and poet Bankim Chandra Chatterjee, in his book Ananda Math, compared India before the 18th Century to the Goddess Kali, resplendent in all glory. He pictured Goddess Kali, bereft of all such glory, reflecting India of the 18th - 19th Century. He opined that India of the future will be again that of a resplendent, bedecked goddess Kali!

His words are turning prophetic. India was 25% of the world's economy till 1800s. India became 1% of the world economy at the dawn of independence. The 300 years of exploitation, decay and neglect have ruined India. However, the true glory of the country did not yet unravel till recently.

It took 58 years for the country to become One Trillion-dollar economy. Second Trillion came in next 12 years and the third trillion in 5 years. Hon'ble Prime Minister Sri Narendra Modi has pledged to make India US Dollar 5 Trillion economy in the next 4-5 years. Most of the Economists of the world predict that India would double its GDP in the next 7 years. Just imagine another 3 trillion Dollars of economy being added in the next 7 years. It is you, the generation of Millennials, who will be the throttle of such a transformation. You need to be innovative, disruptive, productive and agile for India to achieve its lost glory.

For such a transformation to happen, you have to focus on disrupting the entire productive cycle of the economy. Digital transformation is the key to unlock such disruption. Chip making, Quantum computing, computational pharmacy, artificial intelligence, smart agriculture and smart manufacturing are the way forward. Electric Vehicles are already disrupting the transport industry. Smart technology will not only make wealth, but will also help in distributing such wealth efficiently!

Jan Dhan-Aadhar-Mobile has proved how direct benefit transfer can be a game changer for the poor of this country and the public policy too. Andhra Pradesh Government has become a pioneer in this aspect and is following the India Technology Stack. The recently introduced 'Open network for Digital Commerce' will again transform and disrupt commerce and make consumer access possible to even small traders. India is a leader in all these things.

COVID-19 and its aftermath have shown how Quantum computing, computational pharmacy can come together to reduce the time frame for vaccines. Technology has saved millions of lives. India has become an enviable hub of such technologies.

I am glad that Centurion University is in the forefront of most of these developments. Their focus on cutting edge technology domains with over 50 industry partners is now seen as a pathbreaker in technical education. I am glad such a university which is in cutting edge technology, has its roots in Odisha and North Coastal Andhra Pradesh.

For exploiting the booming India's economy, students need to be skilled and must Know-How and not just Know-What. I have been briefed that Centurion University again is the First University in India, to integrate skills into higher education. It is really a pity that education has not focused on competencies in the past. The New Education Policy has rightly corrected that imbalance. I am proud to know that Centurion University is a living and shining example of such focus on competencies. No such education can be delivered in isolation. And here again the University is partnering with the best-in-class industries to deliver such curriculum.

However, no such unbridled economic pursuit of wealth can be sustained, unless it is empowering and inclusive. The poor have got to be empowered to benefit from the disruption and digital transformation. It is to be noted that some States of India have per

capita income which is one fourth of some other states. If youth drop out of schools and colleges due to any reasons, it is a national loss. So, there is a need to promote co-habitation based inclusive education model. The NEP 2020 rightly focusses on that and Centurion University, I am told is in the forefront of such an education model.

Dr. Schumacher, the famous economist, has beautifully argued in his book “Small is Beautiful” that the world has not solved the problem of production. He said transformation of a type of input into output is not value addition. Mahatma Gandhi has summed up the same concept by saying:

“The world has enough for every person’s need and NOT for every person’s greed” Sustainability is a major concern of the world. India cannot blindly accept or follow the paths of such development by destruction. The Sustainable Development Goals have mandated an alternative development path. I am glad to learn that Centurion University has been competing with the World’s best in SDG compliance and is even ranked the best in India in some of them. Renewable Energy, Hydrogen fuels are all some technology solutions in that direction. So also, generating waste from wealth. I am told that the Centurion universities’ 20 Centers of Research, are focusing on the same.

India has rich cultural and social heritage. So, the path it chooses has to be culturally, and socially sustainable too. The University is located in Vizianagaram, the cultural capital of the state. So, my advice to the university would be, to focus as much on local cultures/ Vedic cultures and work on re- discovering the glory of the land. I am happy to learn that Prof. Shantamma Garu, a 94-year-old Faculty member of the university, is doing great work in Vedic science.

My dear graduating students, India has to rediscover its lost glory and eradicate poverty of its people. It has to empower its people by leveraging cutting edge disruptive technologies and mind set. However, it cannot afford to destroy its heritage, nature or its societal balance in this process. India has to demonstrate to the world, not just its’ economic richness but ethical, moral and social richness too. India of the Vedic ages was known for that and somewhere, we need to rewrite that past glory in the present language of the world. Dr. D.P. Pattanayak, the Chancellor of your university, is a doyen in this field. You are truly blessed to have him as your Chancellor.

I am glad that Centurion University has conceived an Institute of Knowledge Societies, which is a beautiful concept in itself. No one society is the repertoire of the human knowledge. Vizianagaram, being the gateway to India’s cultural, economic and social diversity, is the ideal location for such an endeavour.

Convocation speeches have at least one key take-away for the graduating students. Steve Jobs, while delivering such an address to Stanford University, said: “Stay Hungry and Stay Foolish.”

I would like to extend it further. While making India rich again, it needs all of you to be hungry and foolish and enjoy the roller coaster of disruption and digital transformation, we need to stay balanced and stay sustained too. A sustainable Dynamic Roller Coaster ride in life needs a static and stable base.

Be part of such a deep ocean of endeavour and may God bless you all in achieving what you set out for yourself.

Thank you all. Jai Hind

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## CAMPUS NEWS

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### **Faculty Development Programme on The Latest Perspectives of Research**

The eleven-day Faculty Development Programme on 'The Latest Perspectives of Research in Behavioural Sciences (Interdisciplinary)' was organized by the Department of Teacher Education, School of Education, Central University of South Bihar, Gaya, under Pandit Madan Mohan Malaviya National Mission on Teachers and Teaching (PMMMNTT) Scheme of Ministry of Education, Govt. of India, recently through online mode. The main objective of the programme was to acquaint the teachers of higher education institutions with the new techniques and strategies of research in behavioural science.

The Inaugural Session of the programme was chaired by Prof. Kameshwar Nath Singh, Vice Chancellor, Central University of South Bihar, Gaya, and Prof. Harikesh Singh, former Vice Chancellor, Jai Prakash University, Chapra, Bihar was the Chief Guest of the programme. Prof. Kameshwar Nath Singh made the audience and participants mesmerized with his words of wisdom in his presidential address during the session. He stated that research is a rigorous practice which needs passion, perseverance, honesty and dedication. It makes the teachers capable and competent enough to bring quality education.

Prof. Harikesh Singh, in his speech in the inaugural session, emphasized that every research must add an iota of knowledge to the existing knowledge. He said that the Indian Knowledge System must be given priority in research through the medium of Indian languages. A total of 113 participants from various universities and colleges across 20 Indian states took part in the programme. A total of 25 resource persons (1 from Indiana University, USA and 24 from different reputed universities/institutions of the country) contributed to the programme by enlightening and enriching the participants on the latest perspectives on research in behavioural sciences across 40 sessions during the programme.

The main focus areas of discussion in the programme were Introduction to Research and its types, pre-positivism, positivism and post-positivism in research, qualitative research perspectives in

relation to quantitative research perspectives, qualitative approaches to study human behaviour, quantitative and qualitative research tools, behavioural science research and research in general sciences-A comparison, experimental research and its designs, semantic differential analysis, Q-methodology, The context and techniques of using statistics in behavioural research, uses of statistical software for data analysis in behavioural research, historical research-A qualitative research method in behavioural sciences, policy analysis- purposes and processes, grounded theory research, ethnomethodology, symbolic interactionism, narratives, phenomenological research, discourse analysis, interpretative study, naturalistic inquiry, participatory research, case study, content analysis, triangulation, significance and process of using mixed methods research in behavioural sciences, behavioural research for innovation and development, frontline areas of behavioural research, interdisciplinary research in behavioural sciences-the way forward, research issues in diversified behavioural sciences- social sciences, psychological sciences, educational sciences and other such fields, issues of quality of research in behavioural sciences-the global perspective and others.

The valedictory session was chaired by Prof. Prakash Chandra Agarwal, Principal, Regional Institute of Education, NCERT, Bhubaneswar. He inspired the participants to be honest and transparent while conducting research in behavioural sciences. He suggested that research requires patience and is a time-consuming affair, therefore, mutual cooperation or collaboration is important in the process of conducting research. The active involvement and cooperation of Prof. Kameshwar Nath Singh, Vice Chancellor, Central University of South Bihar, Gaya led the programme towards its success in the self-sustaining mode. Prof. Kaushal Kishore, Head, Department of Teacher Education, and Dean, School of Education, Central University of South Bihar, Gaya provided help and cooperation for making the programme successful.

The programme was coordinated by Dr. Tapan Kumar Basantia, Nodal Officer of the PMMMNTT Scheme and Associate Professor, Department of Teacher Education, Central University of South

Bihar, Gaya. Dr. Mitanjali Sahoo, Assistant Professor, Department of Teacher Education, Central University of South Bihar, Gaya and Dr. Sandeep Kumar, Assistant Professor, Department of Teacher Education, Central University of South Bihar, Gaya were the Co-coordinators of the programme. The programme acted as a platform to acquaint the faculty members of Higher Education Institutions across the country with the contexts, processes, outcomes, issues/problems, challenges and future prospects of research on behavioural sciences, especially from interdisciplinary perspectives.

### **International Conference on Advanced Communications and Machine Intelligence**

A two-day International Conference on ‘Advanced Communications and Machine Intelligence’ is being organized by the National Institute of Technology, Warangal, Telangana on October 30-31, 2023. The event aims to bring together a diverse group of participants including academicians, scientists, researchers from industry, research scholars, and students. Its multidisciplinary nature creates opportunities for national and international collaboration and networking among universities and institutions from India and abroad. The ultimate goal is to promote research and development activities by translating basic research into applied investigation and converting applied analysis into practice. It also aims to raise awareness about the importance of basic scientific research in different fields that match current trends. The Topics of the event are:

#### ***Machine Intelligence***

- Data Mining and Warehousing.
- Computational Intelligence.
- Big Data Analytics.
- Information Management.
- Social and Smart Networks.
- Information Retrieval.
- Cognition and AI.
- Knowledge Representation.
- Multi-agent Systems.
- Natural Language Processing.
- Planning and Action.
- Heuristic Search Techniques.
- Intelligent Robotics.

- Commonsense Reasoning.
- Recommendation System.
- Machine Learning.
- Deep Learning.
- Algorithms and Optimization.
- Applications of AI.
- Computational Neuroscience.
- Data Science.
- Image and Pattern Recognition.
- Bio-medical Informatics.

#### ***Advanced Communications***

- Network Performance Analysis.
- Parallel and Distributed Networks.
- Smart City Applications.
- Internet of Things Networks.
- Wireless Sensor Networks.
- Fault Tolerant Networks.
- IoT Architectures and Protocol.
- IoT’s impact on 5G and 6G.
- Cloud and Fog Computing.
- Grid and Cluster Computing.
- Embedded and Green Computing.
- Mobile and Ubiquitous Computing.
- High-Performance Computing.
- Human-Computer Interaction.
- Speech and Signal Processing.
- Software Defined Networks.
- Security.
- Block Chain Technologies.

For further details, contact Organizing Chair, Dr. Venkateswara Rao Kagita, National Institute of Technology, Warangal, Telangana-506004, E-mail: [micaconf@gmail.com](mailto:micaconf@gmail.com). For updates, log on to: <http://mica.org.in>

### **National Seminar on Revamping Indian Tradition and Culture through NEP–2020**

A two-day National Seminar on ‘Revamping Indian Tradition and Culture through NEP– 2020: Multilingual, Multicultural and Multidisciplinary Modes of Education’ is being organised by the

Department of Humanities and Social Sciences, Indian Institute of Technology Roorkee, Roorkee, Uttarakhand on August 18-19, 2023. The event is sponsored by the Indian Council of Social Science Research, New Delhi. By inviting academicians, policymakers and artists possessing expertise in the diversity of Indian arts, literature, language and culture, the event would add to the mission of the National Education Policy to develop our country's teaching infrastructure in a more holistic sense. The aim of the event is to invite creative ideas and critical frameworks by which we can concur on various possibilities to promote the Indian language and culture in all its diversity and colours. It offers a platform to invent practical ways to introduce and includes indigenous knowledge systems of India, including tribal and other local knowledge, in the pedagogical frameworks of national curricula. It perceives NEP as a tool to preserve the cultural history of India where it provides space to envelop ideas that would uplift the endangered languages, arts, and traditions by revamping the same in our contemporary educational policies. It will throw light on the diversity and inclusivity of the suggested liberal arts incorporated and taught in public and private educational institutions. The broad areas of the Event may include, but are not limited to the following:

- NEP 2020: Promises, Challenges, and Implementations.
- *Atmanirbhar Bharat*: Empowering the Youth for Future Challenges through NEP.
- Effective Communication: A Tool for Empowerment.
- Vocalizing the Local through NEP.
- Importance of Skill Development in a Globalized World.
- Imperatives and Challenges of Media Literacy in NEP.
- Role of Information and Communication Technology (ICT) in Pedagogical Training.
- Recovering the Lost Traditions through NEP.
- Revisiting Indian History and Culture in a New Age.
- Literary Responses to NEP.
- Women's Response and Representations.
- Diaspora and Migration Studies.

- Indigenous Knowledge System: Indian Scriptures and Society.
- (Re)visiting Myth and Traditions in Contemporary Literary Studies through NEP.
- Restoring Endangered Languages, Literature, Arts and Traditions.
- Literature in Translation.
- The Cosmopolitan Imagination and Literature.
- Global Concerns and Literary Practices.
- Ecocritical Discourses.
- Integration of Art and Culture in Experiential Teaching and its Implications.
- Interdisciplinarity: Theories, Practices and Values.

For further details, contact Convenor, Prof. Binod Mishra, Department of Humanities and Social, Indian Institute of Technology Roorkee, Roorkee-247667, Uttarakhand, Mobile No: 09026411099 / 09424534733/ 09556703029 /09086102540, E-mail: [nepiitr.hs@gmail.com](mailto:nepiitr.hs@gmail.com). For updates, log on to: [https://hs.iitr.ac.in/about/news/ICSSR\\_CFP\\_NEP\\_Seminar\\_IITR\\_\(2023...](https://hs.iitr.ac.in/about/news/ICSSR_CFP_NEP_Seminar_IITR_(2023...)

### **International Conference on Innovations in Power and Advanced Computing Technologies**

A three-day International Conference on 'Innovations in Power and Advanced Computing Technologies' is being jointly organised by the Vellore Institute of Technology (VIT), Vellore, India and Universiti Malaya (UM), Kuala Lumpur, Malaysia during November 24-26, 2023. The focus of the conference is to provide a unique platform for the exchange of ideas and synergy among researchers, academicians, industry experts, and entrepreneurs across the globe in a gamut of divergent engineering and technology disciplines. State-of-the-art innovations in power and advanced computing technologies including the latest research trends and developments in emerging areas such as Smart and microgrids, Electric Vehicles, Automatic Control and Computing Technologies in Green Commercial Buildings, Molecular Imaging, Smart Photonic Systems, Cognitive Computing, etc. are planned to be deliberated during the conference. The Topics of the Event are:

#### **Power**

- Soft computing Applications in Power Systems.
- Power System Modelling and Control.

- FACTS Devices - Applications in Power System.
- Power System Stability.
- Switchgear and Protection.
- Power Quality Issues and Solutions.
- Smart Grid.
- Green and Renewable Energy Technology.
- Efficient Energy Utilization.
- Energy Auditing.
- Power Electronics.

#### ***Control and Instrumentation***

- Intelligent Control.
- Fault Detection and Diagnosis.
- Hybrid Systems Modelling and Design.
- Systems Identification and Selection.
- Sensors and Systems.
- Analytical and Virtual Instrumentation.

#### ***Electronics***

- Signal / Image Processing.
- Biomedical Instrumentation.
- VLSI / Embedded Systems.
- Communication Signal Processing.
- Mobile Communication.
- Wireless Communications.
- Microprocessor-based Technologies.
- Antenna and Wave Propagation.
- Industrial Electronics and Automation Robotics.

#### ***Computing***

- Grid Computing.
- Cloud Computing.
- Data Structures and Algorithms.

- Artificial Intelligence.
- Automated Software Engineering.
- Bioinformatics and Scientific Computing.
- Computer Architecture and Embedded Systems.
- Computer Networks and Security.
- Computer Aided Design / Manufacturing.
- Information Retrieval.
- Multimedia Applications.
- Security and Cryptography.
- Big Data Analytics.
- Machine Learning.
- Deep Learning.

#### ***Nuclear and Plasma***

- Applications of Nuclear Principles and Technology.
- Computational Techniques in Nuclear Physics.
- Plasma Studies in Astronomy and Astrophysics.
- Techniques in High-Energy Physics.
- Techniques for Radio-Waste Management.
- Nuclear Reactor Engineering and Design.
- Emerging Technologies to Harness Nuclear Fusion.
- Applications of Radio-Nuclides.
- Dark Matter, Dark Energy and Background Radiation.
- Disaster Management around Nuclear Facilities.

For further details, contact Organising Secretary, Dr. J. Belwin Edward, Vellore Institute of Technology, Vellore-632014 (Tamil Nadu), Mobile No: +91-9994911487, E-mail: [jbelwinedward@vit.ac.in](mailto:jbelwinedward@vit.ac.in). For updates, log on to: <https://events.vit.ac.in>

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## AIU News

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### **Faculty Development Programme on Art of Writing Research Paper**

A six-day Online Faculty Development Programme on 'Art of Writing Research Paper' was organised by the Association of Indian Universities (AIU), New Delhi in collaboration

with the Academic and Administrative Development Centre (AADC), Atal Bihari Vajpayee University, Bilaspur, Chhattisgarh during May 22-27, 2023. About seventy-five participants from various states were registered and in total, eleven sessions were conducted.

Dr. Amarendra Pani, Joint Director and Head, Research Division, AIU was the Chief Guest during the inaugural function. The function was presided over by Prof ADN Bajpai, Vice Chancellor, Atal Bihari Bajpai University, Bilaspur, Chhattisgarh. The Convener, Dr. H S Hota delivered the welcome address, extending a warm welcome to the esteemed guests, participants, and faculty members. He highlighted the objectives and significance of the programme in enhancing research writing skills among the faculties. Dr. Pani, in his address, highlighted the rapidly evolving landscape of technology in the modern era and emphasized the need for teachers and administrative officers to adapt to these advancements. He emphasized the transformative power of technology in education and administration. His insights encouraged the participants to embrace technological advancements, integrate them into their teaching methodologies, and adopt efficient administrative practices. Dr. Pani's address served as a catalyst for educators and research scholars to explore new possibilities, leverage technology to enhance their professional practices and prepare students for the demands of the digital age.

Prof A D N Bajpai addressed the participants and highlighted several key points. In his Presidential Address, he emphasized the need to overcome the lack of novelty in Indian research work by encouraging innovative and original research. Prof Bajpai also stressed the importance of including references to Indian literature in research papers to enrich the academic discourse. Additionally, he advocated for the writing of research papers in Indian languages, promoting wider accessibility and the preservation of Indian knowledge. At the end of the inaugural function, Coordinator, Dr. Rashmi Gupta expressed her gratitude and proposed a vote of thanks.

Prof. Maya Ingle, Devi Ahilya University, Indore focused on 'Research Methodology and the Structure of a Research Paper' and provided the participants with valuable insights to enhance their research skills. She emphasized the importance of selecting appropriate research methods based on research objectives and explained the various qualitative, quantitative, and mixed methods available. Prof. Ingle also discussed the essential components and structure of a research paper, highlighting the significance of a well-structured

introduction, comprehensive literature review, robust methodology section, clear presentation of results, and a thorough discussion and conclusion. Her session equipped participants with the necessary tools and knowledge to conduct research and write scholarly papers with accuracy, quality, and contribution to the academic community.

Dr. Ved Mitra Shukla, Rajdhani College, University of Delhi delivered on 'Literature Reviews'. Dr. Shukla emphasized the significance of literature reviews in research papers, highlighting their role in identifying research gaps, providing theoretical background, justifying the research problem, and contributing to the existing body of knowledge. He provided participants with a step-by-step process for conducting literature reviews, emphasizing the importance of conducting comprehensive searches, selecting and evaluating sources, and synthesizing the literature to identify key themes and trends. Dr. Shukla also provided guidance on structuring and writing a literature review, including the need for a clear introduction, thematic organization, and critical evaluation of existing research. His lecture provided the necessary skills and knowledge to effectively conduct literature reviews, enhancing the overall quality and impact of their research papers.

Prof. Anupama Saxena, Guru Ghasidas Central University, Bilaspur delivered on 'Formulating Research Questions'. Prof. Saxena emphasized the significance of research questions in guiding the research process and establishing a clear focus for the study. She highlighted the importance of formulating research questions that are specific, measurable, achievable, relevant, and time-bound (SMART). Prof. Saxena provided participants with practical guidance on identifying gaps in existing knowledge, aligning research questions with research objectives, and refining them to ensure focus and feasibility. Her lecture was very useful to develop clear and well-defined research questions that would enhance the quality and relevance of their research endeavors.

Prof. H S Hota, Atal Bihari Vajpayee University delivered an insightful lecture on 'The Use of ICT Tools for Data Analysis'. Prof. Hota highlighted the significance of ICT tools in handling the large volume of research data and extracting meaningful insights. He introduced participants to popular tools such as SPSS, showcasing their specific applications in data analysis. Through a hands-on demonstration,



Prof. Hota guided participants through the process of collecting data using google forms. He also discussed the more advanced capabilities of statistical software like SPSS emphasizing their ability to perform complex analyses and generate visualizations. Prof. Hota concluded the lecture by providing additional resources and learning opportunities for participants to further enhance their skills in using ICT tools for data analysis.

Dr. Barnali Roy Choudhury, Netaji Subhash Open University, Kolkata delivered a comprehensive and practical lecture on 'Reference Management Systems'. Dr. Choudhury emphasized the importance of efficient reference management in research writing and the role of reference management systems in streamlining the process. She introduced participants to popular reference management tools like Mendeley, and Zotero, highlighting their features and compatibility with different platforms and citation styles. Through hands-on demonstration, Dr. Choudhury showcased the practical use of these systems, demonstrating how to import, organize, and generate citations and bibliographies seamlessly. She also shared valuable tips and best practices for effective use, including maintaining a consistent naming convention and regularly backing up reference libraries.

Prof. K K Sahu, Pt. Ravi Shankar Shukla University, Raipur delivered a lecture on 'Plagiarism and Research Ethics'. Prof. Sahu emphasized the detrimental impact of plagiarism on academic integrity and the credibility of research. He explained the various forms of plagiarism and discussed the severe consequences that can have on the plagiarizer's reputation and career. Prof. Sahu also highlighted the broader concept of research ethics, including the need for researchers to adhere to ethical principles throughout the research process. He provided practical strategies to prevent plagiarism, such as proper citation and referencing techniques and the use of plagiarism detection software.

Prof. S K Shahi, Guru Ghasidas Central University Bilaspur delivered on 'Intellectual Property Rights (IPR) and Patents'. Prof. Shahi provided participants with a comprehensive understanding of IPR and its relevance to the academic and research domains. He emphasized the importance of patents as a means of protecting and promoting innovation, creativity, and knowledge

creation. Prof. Shahi discussed the process of patent registration, the criteria for patentability, and the rights and responsibilities of patent holders. He also highlighted the significance of conducting patent searches and literature reviews to ensure that research work is not infringing on existing patents and to appropriately acknowledge and reference patented technologies. Through case studies and examples, Prof. Shahi demonstrated the practical application and impact of patents in various industries.

Prof. Swati Sherekar, Sant Gadge Baba University Amravati delivered her talk on 'Journal Selection and Journal Matrices'. The session aimed to guide participants in selecting suitable journals for publishing their research work and understanding the importance of journal matrices in evaluating journal quality. Prof. Sherekar provided insights into the criteria for journal selection, including relevance, impact factor, scope, and audience. She explained how journal matrices, such as SCImago Journal Rank (SJR) and Journal Citation Reports (JCR), can be utilized to assess the reputation and impact of journals in specific fields. Through practical examples and case studies, Prof. Sherekar demonstrated the process of using journal matrices to make informed decisions about publishing research in reputable and respected journals.

Prof. P P Murthi, Guru Ghasidas Central University Bilaspur delivered his talk on 'LaTeX'. The session aimed to introduce participants to the powerful typesetting system and its applications in academic and research writing. Prof. Murthi provided an overview of LaTeX, highlighting its advantages over traditional word processors in terms of document formatting, mathematical equations, cross-referencing, and bibliography management. He guided participants through the basics of LaTeX, including document structure, commands, and packages. Prof. Murthi also demonstrated the creation of scientific documents, including research papers and thesis, using LaTeX templates. Through hands-on exercises, participants gained practical experience in typesetting documents, integrating figures and tables, and generating bibliographies.

Dr. Shraddha Masih, Devi Ahilya University Indore delivered on 'Answer to Reviewer Questions'. The session aimed to equip participants with the skills and strategies to effectively address reviewer comments and enhance the chances of successful

publication. Dr. Masih shared valuable insights on understanding reviewer expectations, analyzing comments constructively, and formulating appropriate responses. She emphasized the importance of maintaining a professional and respectful tone while addressing reviewer queries and suggestions. Dr. Masih provided practical tips and techniques for crafting clear, concise, and persuasive responses that adequately address the concerns raised by reviewers. Through case studies and examples, she demonstrated effective techniques for revising manuscripts and incorporating feedback to improve the quality and impact of research papers.

Prof. S N Shukla, Vice Chancellor, Pt. Ravi Shankar Shukla University, Raipur was the Chief Guest of the Valedictory Function. Prof. A D N Bajpai, Vice Chancellor, Atal Bihari Bajpai University, Bilaspur presided over the function. The programme's Convenor, Prof. H.S. Hota, extended a warm welcome to the gathering, expressing gratitude to the participants for their active involvement and valuable contributions throughout the week-long programme. The valedictory function provided an opportunity for participants to share their feedback, reflecting on the knowledge and skills they acquired during the programme. The participants expressed their appreciation for the guest lectures, interactive

sessions, and hands-on activities, which contributed significantly to their learning experience. During his address, Prof. S N Shukla emphasized the fundamental concept of research as a means of fostering invention and innovation. He stressed the importance of conducting research that is not only academically rigorous but also socially relevant and beneficial to society.

Prof. A D N Bajpai, in his speech, highlighted the evolving nature of research in the current era, emphasizing that research can be conducted anywhere and is not limited to a specific geographical location. He emphasized the role of hard work and dedication in the development of one's personality and encouraged the participants to continue their research pursuits with passion and perseverance.

Coordinator, Dr. Rashmi Gupta extended special thanks to Prof. S N Shukla and Prof. A D N Bajpai for gracing the valedictory function with their presence and speeches. She also proposed a vote of thanks, expressing gratitude to all the faculty members, guest speakers, and participants for their valuable contributions in making the programme a resounding success. Certificates were distributed to the participants after examinations.

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## AIU Publication

on

### ***REIMAGINING INDIAN UNIVERSITIES***

'Reimagining Indian Universities' edited by Dr. (Mrs) Pankaj Mittal and Dr S Rama Devi Pani is a collection of essays by some of the greatest thinkers in the field of Indian higher education. Each essay in the book examines one or more of the critical topics and provides solutions and methods to overcome the issues involved in them. It provides new solutions and methods in the form of reforms and innovations to elevate Indian universities to world-class top-ranking levels. The book aims at providing a roadmap to government as well as the universities to gear themselves towards becoming more responsive to the present and future demands of higher education. Generating a corpus of new ideas that are significant for reimagining, reforming and rejuvenating Indian higher education system, Book is 'must read' for all those who are interested in reforming Indian Higher Education System.

The release of the book in the Annual Meet of Vice Chancellors 2020, coincides with the launch of New Education Policy. The Foreword for the Book was written by the then Minister of Education Shri Ramesh Pokhriyal 'Nishank'.

***PP: 372, Unpriced. Available at AIU Website: [www.aiu.ac.in](http://www.aiu.ac.in)***

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# THESES OF THE MONTH

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## SOCIAL SCIENCES

### A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of April-May, 2023)

#### Commerce

1. Ram, Mahipal Bharatbhai. **A study on working capital management of selected pharmaceutical companies in India.** (Dr. Hajabhai D Barad), Department of Commerce, Bhakta Kavi Narsinh Mehta University, Junagadh.

2. Bharada, Rambhai Jakhara. **An empirical investigation of corporate governance in selected companies of Gujarat State.** (Dr. Yogeshkumar L Thumar), Department of Commerce, Bhakta Kavi Narsinh Mehta University, Junagadh.

3. Chaniyara, Jagrutiben Parsotambhai. **An empirical study on financial efficiency of selected FMCG companies of India.** (Dr. S J Parmar), Department of Commerce, Saurashtra University, Rajkot.

4. Dave, Sonal Navinchandra. **An approach to predict insolvency based on financial potential of steel industry in India.** (Dr. Paresh Shah), Department of Commerce, Rai University, Ahmedabad.

5. Dodia, Ishitaben Gagajibhai. **A study of productivity and financial efficiency of FMCG industry of India.** (Dr. S J Parmar), Department of Commerce, Saurashtra University, Rajkot.

6. Jilariya, Deval Harsurbhai. **An application of Herzberg S Dual factor theory on the job satisfaction of commerce and management teachers working in State universities of Gujarat State.** (Dr. Yogeshkumar L Thumar), Department of Commerce, Bhakta Kavi Narsinh Mehta University, Junagadh.

7. Khariwal, Shruti. **Financial inclusion of rural people of Sri Ganganagar District.** (Dr. Sheetal Aggarwal), Department of Commerce, Tantia University, Sri Ganganagar.

8. Makwana, Nitin Valjibhai. **Analysis of profitability in pharmaceutical industry.** (Dr. Paresh Shah), Department of Commerce, Rai University, Ahmedabad.

9. Nakum, Dilipkumar Hansraj. **A comparative study of cash management practices of Indian corporate sector: Analysis of selected companies.** (Dr.

Kailash P Damor), Department of Commerce, Saurashtra University, Rajkot.

10. Oza, Megha Sanjaybhai. **An exploratory research on consumer behaviour towards the various products of khadi and gramodyog of Gujarat State.** (Dr. Sonal Nena), Department of Commerce, Saurashtra University, Rajkot.

11. Poonam. **Demonetization and e-payments system: A study of small vendors in Haryana.** (Dr. Pinki Rani), Department of Commerce, Indira Gandhi University, Meerpur.

12. Rajender Kumar. **Impact of social media marketing on consumers buying decisions: An empirical study of fast moving consumer goods.** (Dr. Hariom), Department of Commerce, Indira Gandhi University, Meerpur.

13. Ratapia, Neha Nandlal. **Investment behaviour-options, evaluation and information analysis by the investors of Gujarat State.** (Dr. Yogeshkumar L Thumar), Department of Commerce, Bhakta Kavi Narsinh Mehta University, Junagadh.

14. Ravika. **Impact of social media on consumer buying behavior in Haryana & Rajasthan Region: A Critical study.** (Dr. Sheetal Aggarwal), Faculty of Commerce, Tantia University, Sri Ganganagar.

15. Sunita. **Impact of working environment on employee's job satisfaction: A study of Haryana power sector.** (Dr. Kamlesh Rani), Department of Commerce & Management, Chaudhary Devi Lal University, Sirsa.

#### Economics

1. Khunti, Kajal Dilipbhai. **The impact of salinity ingress of coastal area on agriculture sector in context of Porbandar District after 2008.** (Dr. Dina H Lodhiya), Department of Economics, Bhakta Kavi Narsinh Mehta University, Junagadh.

2. Sunil Kumar, P. **Rural road connectivity in Karnataka: A study of Namma Grama Namma Raste Yojane (NGNRY).** (Dr. B Jayarama Bhat), Department of Economics, Kuvempu University, Shankaraghatta.

## Education

1. Anju Rani. **An analysis of in service teacher education programmes in higher education.** (Prof. Nivedita), Department of Education, Chaudhary Devi Lal University, Sirsa.

2. Asha Rani. **Development of education as a discipline: An analytical study.** (Dr. Sangeeta Agarwal), Faculty of Education, Tanta University, Sri Ganganagar.

3. Dhaka, Gurudatt Singh. **A study of effect of stress, in-service training programme experience and attitude towards teaching profession on teaching effectiveness of senior secondary schools teachers.** (Dr. Anil Kumar), Faculty of Education, Tanta University, Sri Ganganagar.

4. Gamit, Ranjitbhai Gamanbhai. **Awareness about use of ICT among trainees of teacher education college of Gujarat State.** (Dr. Hitesh Solanki), Department of Education, Saurashtra University, Rajkot.

5. Joshi, Swati Dipakbhai. **Determination of difficulty parameters of units in science subject of ninth standard and construction of teaching programme for difficult units and its effectiveness.** (Dr. Bharat B Ramanuj), Department of Education, Saurashtra University, Rajkot.

6. Kamra, Mamta. **Study of frustration, emotional maturity and life satisfaction in students studying in academic and teacher training colleges.** (Dr. Ritu Bala), Faculty of Education, Tanta University, Sri Ganganagar.

7. Khan, Aiyaj Ahmad. **Muslim samudaye ke samajik uthan mein shaikshik paryasoan ke sandarbh mein Sir Syed Ahmad Khan ke yogdan tatha vartman mein uski prasangikta ka adhyayan.** (Dr. Chandrakanta Jain), Department of Education, Dr Harisingh Gour Vishwavidyalaya, Sagar.

8. Khan, Roohi. **A study of learning style of students in relation to students academic satisfaction at +2 level.** (Prof. Rashmi Mehrotra), Department of Education, Teerthanker Mahaveer University, Moradabad.

9. Kharachiya, Bhanuben Balvantsinh. **Development of the Sanskrit language skill through multimedia teaching strategy at grade-VIII.** (Dr. Ashvinbhai D. Shah), Department of Education, Rai University, Ahmedabad.

10. Melajiya, Dipakbhai Bachubhai. **Construction and standardisation of verbal reasoning test for the students of grade-IX.** (Dr. Ashvinbhai D Shah), Department of Education, Rai University, Ahmedabad.

11. Rai, Kishor Kumar. **Life skills in relation to attitude towards alcohol abuse and academic achievements of senior secondary students of Sikkim.** (Dr. Vandana), Department of Education, North Eastern Hill University, Shillong.

12. Sarif, Nawaz. **Development of psychological capital amongst students: A cross-sectional study in West Bengal.** (Dr. Vandana), Department of Education, North Eastern Hill University, Shillong.

13. Seema Rani. **Study of teaching aptitude and professional values of teachers working in higher secondary level schools.** (Dr. Vandana Dua), Department of Education, Tanta University, Sri Ganganagar.

14. Solanki, Nilesh M. **A study of job satisfaction and mental stress of head teacher of primary school of Saurashtra Region.** (Dr. Ketan Gohel), Department of Education, Saurashtra University, Rajkot.

15. Soni, Sheetal Jagdishchandra. **A comparative study of personality trait of secondary school students of Gujarat State.** (Dr. Vinitkumar M. Thakur), Department of Education, Rai University, Ahmedabad.

16. Vansiya, Soniyaben Narendrasinh. **A study of teaching aptitude of B.Ed. student teachers of South Gujarat University in relation to their teaching competency.** (Dr. Ashvinbhai D Shah), Department of Education, Rai University, Ahmedabad.

17. Wahlang, Vanecchia Grace. **Attitude of higher secondary students towards life skills in relation to their educational and vocational aspirations in Meghalaya.** (Prof. S M Sungoh), Department of Education, North Eastern Hill University, Shillong.

18. Yograj. **Educational Philosophy of Dr. Bheem Rao Ambedkar and its relevance for social change.** (Dr. Anil Kumar), Faculty of Education, Tanta University, Sri Ganganagar.

## Journalism & Mass Communication

1. Shankar, Gugguloth. **Use of media in Swachh Bharat Mission: A study in Kamareddy District Telangana State.** (Dr. Y Prabhanjan Kumar), Department of Mass Communication, Telangana University, Nizamabad.

2. Suresh, K G. **Emerging trends of regional news channels in India: A comparative study of Kerala and Uttar Pradesh.** (Dr. Maithili Ganjoo), Faculty of Media Studies and Humanities, Manav Rachna International Institute of Research and Studies, Faridabad.

3. Tandon, Devashish Prasad. **Role of DD Kisan in Agricultural transformation: An exploratory study**

among farmers of Sahibabad. (Dr. Maithili Ganjoo), Faculty of Media Studies and Humanities, Manav Rachna International Institute of Research and Studies, Faridabad.

#### Law

1. Bamal, Jannat. **Freedom of speech and expression vis-a-vis contempt of courts.** (Dr. Sandhya Rohal), Department of Laws, Bhagat Phool Singh Mahila Vishwavidyalaya, Khanpur Kalan.

2. Dharmvir Singh. **White collar crimes: A socio-legal study in national and international perspective.** (Dr. Kaptan Chand), Department of Law, Tantia University, Sri Ganganagar.

3. Hazra, Ashis Kumar. **Dealing with hostile witnesses: The role of judges and its impact on criminal justice delivery system: A critical analysis with reference to offences affecting life in West Bengal.** (Dr. Sarfaraz Ahmed Khan), Department of Law, The WB National University of Juridical Sciences, Kolkata.

4. Kumar Rakesh. **A study of the trade mark law in India with special reference to the passing off.** (Dr. Medha Vaid), Faculty of Law, Tantia University, Sri Ganganagar.

5. Mishra, Nimisha. **Study of welfare of transgender of India with special reference to State of Chhattisgarh.** (Dr. Kiran Dennis Gardner), Department of Law, Alliance University, Bengaluru.

6. Prakash, Sivarama Krishna. **Critical legal analysis on rights and liabilities when using artificial intelligence in autonomous vehicles.** (Dr. V Shyam Kishore), Department of Law, Alliance University, Bengaluru.

7. Shah, Siddhant Rakeshkumar. **Study on convergence of technology: Issue and challenges with special reference to Intellectual Property Rights.** (Dr. Prachi Motiyani), Department of Law, Gujarat University, Ahmedabad.

8. Shivanna, BN. **A critical study of administration of criminal justice in Karnataka with special reference to Bangalore City.** (Dr. A Mohanram), Department of Law, Kuvempu University, Shankaraghatta.

9. Vora, Rucha Narendra. **Environmental justice in India: The role of appellate authority with reference to the water (Prevention and Control of Pollution) Act, 1974 and The Air (Prevention and Control of Pollution) Act, 1981.** (Dr. Mayuri H Pandya), Department of Law, Gujarat University, Ahmedabad.

#### Management

1. Acharya, Nayanatara. **Aristotelian rhetorical analysis of CSR communication of select Indian companies: Exploring the SDG agenda.** (Dr. Vivekanand), Department of Management, Alliance University, Bengaluru.

2. Chauhan, Priya. **Role of stress management in the employee's job satisfaction with special reference to MNC's National Capital Region (NCR).** (Dr. S S Chauhan), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

3. Dave, Maulik Ashvin. **Employees happiness at workplace in MSMEs of Gujarat.** (Dr. Ashish Rami), Department of Management, Rai University, Ahmedabad.

4. Eswaramoorthy, K. **Impact of leadership style on job satisfaction: An empirical study of information technology companies in Bangalore City.** (Dr. Anitha B), Department of Management, CMR University, Bangalore.

5. Harveer Singh. **A study of factors affecting historical tourism development and management of the Meerut District.** (Dr. Anuj Goel), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

6. Rathod, Pratima Rameshchandra. **Impact of brand image on consumer buying behaviour in apparel sector in Gujarat.** (Dr. Anjali Gokhru), Department of Management, Gujarat University, Ahmedabad.

7. Sardar Jasleen Harpal Singh. **Emerging trends in Indian fashion apparel market and perception of Indian consumers related to Indian brands vs International brands.** (Dr. Neelima Ruparel), Department of Management, Gujarat University, Ahmedabad.

8. Sharma, Heena. **A comparative study of employee engagement practices in private sugar mills of Haryana and Uttar Pradesh.** (Dr. C Venkateswaran), Department of Management, Maharishi Markandeshwar University, Ambala.

9. Sunny, K.G. **A study on employee empowerment and organisational commitment of private school teachers in Kerala.** (Dr. Neha Yajurvedi), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

#### Physical Education & Sports

1. Prasad, Dharmendra. **Effectiveness of mock training and mind management technique on the**

**frustration, anxiety, stress and depression level of boxing players.** (Dr. Surjeet Singh Kawsan), Faculty of Physical Education, Tanta University, Sri Ganganagar.

#### **Political Science**

1. Kaye, Minbi. **Women empowerment in Arunachal Pradesh: A case study of East Siang, District.** (Prof.Nani Bath), Department of Political Science, Rajiv Gandhi University, Itanagar.

2. Thakkar, Rameshkumar Thakarshibhai. **Panchayati Raj and development: a comparative study of Rajpur and Gaja Village of Patan Taluka.** (Dr. Gajendra Bhanushanker Shukla), Department of Political Science, Rai University, Ahmedabad.

#### **Psychology**

1. Bagvadiya, Rupal Vasantlal. **Suicidal tendency, depression and anxiety college students.** (Dr. Ashwin Jansari), Department of Psychology, Rai University, Ahmedabad.

2. Lalljee, Alisha. **Sexual behaviour in adolescents with intellectual impairment.** (Dr. Chandita Baruah), Department of Psychology, Assam Don Bosco University, Guwahati, Assam.

3. Lathiya, Chandani Hareshbhai. **A study of psychological empowerment emotional intelligence happiness and attitude towards life with references to Vipassana meditation gender and income.** (Dr. Kiritkumar L Nandaniya), Department of Psychology, Bhakta Kavi Narsinh Mehta University, Junagadh.

4. Maru, Swati Jaysukhbhai. **A study of an effect of internet addiction stress and depression on mental health of college students.** (Dr. Manish P Shukla), Department of Psychology, Saurashtra University, Rajkot.

5. Nambiar, Deepika. **Interpersonal emotion regulation strategies and personality as predictors of psychological well-being among students.** (Dr. Arunima Dube Upadhyay), Department of Psychology, CMR University, Bangalore.

6. Nanavati, Pranali Kalapibhai. **A psychological study of well being, loneliness and social support among old age people.** (Dr. Rajeshbhai K Dodiya), Department of Psychology, Bhakta Kavi Narsinh Mehta University, Junagadh.

7. Shukla, Kshamabhai Pramodbhai. **Comparative study of self concept, adjustment and stress in students of Vedic education and formal education.** (Dr.

Kiritkumar L Nandaniya), Department of Psychology, Bhakta Kavi Narsinh Mehta University, Junagadh.

8. Vanraj, Babubhai Kalabhai. **A comparative study of ego-strength, psychological well-being and social adjustment with reference to meditation.** (Dr. Masaribhai Nandaniya), Department of Psychology, Bhakta Kavi Narsinh Mehta University, Junagadh.

#### **Public Administration**

1. Bisla, Jyoti. **Impact of the Haryana Panchayati Raj (Amendment) Act, 2015 on the working process of Panchayati Raj institutions.** (Prof. Satyawan), Department of Public Administration, Chaudhary Devi Lal University, Sirsa.

2. Ram Lal. **Contribution of Dr Bhim Rao Ambedkar in social justice: A study.** (Prof.Satyawan), Department of Public Administration, Chaudhary Devi Lal University, Sirsa.

#### **Social Work**

1. Narzary, Victor. **A study of land: Exploring its meaning and practices among the Bodos.** (Dr. Luke Daimary), Department of Social Work, Assam Don Bosco University, Guwahati, Assam.

2. Swargiary, Bibharani. **A study on widowhood: Its status and experience vis-a-vis Bodo movement.** (Dr. Luke Daimary), Department of Social Work, Assam Don Bosco University, Guwahati, Assam.

#### **Sociology**

1. Kanojia, Akarti. **Samkaleen samaj mein vridhoan keesamasyaye: Ek samajshastriye adhyayan: Madhya Pradesh ke Sagar Tehseel ke vishesh sandarbh mein.** (Prof. Diwakar Singh Rajput), Department of Sociology, Dr Harisingh Gour Vishwavidyalaya, Sagar.

2. Vora, Geetaben Tulasibhai. **A sociological perspective of expanding new direction of women economic sector: With reference to Rajkot District.** (Dr. H P Sondarva), Department of Sociology, Saurashtra University, Rajkot.

#### **Tourism & Hospitality Services**

1. Behera, Sachin Kumar. **Souvenir buying behaviour of tourists: A study of Raghurajpur and Pipli of Odisha.** (Dr. P Gautam and Prof.Sarat Kumar Lenka), Department of Tourism and Hotel Management, North Eastern Hill University, Shillong.

□



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Aruna Asaf Ali Marg, New Delhi-110067

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Online application will be accepted from **26<sup>th</sup> June 2023**.

Last date for online submission of application form is **11<sup>th</sup> July 2023**.

For detailed guidelines and application format, visit [www.icssr.org](http://www.icssr.org)



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**Administrative Secretary**

## KURIAKOSE ELIAS COLLEGE, MANNANAM

Mannanam P.O., Kottayam-686 561, Kerala

### ASSISTANT PROFESSOR VACANCY

Applications are invited from persons with hearing disability for appointment as Assistant Professor in Psychology (1 vacancy) in Kuriakose Elias College, Mannanam against a permanent vacancy as per G.O. (Ms) No.242/2022/H.Edn dated 18.05.2022. Qualifications, age and scale of pay will be as per UGC/Government/University norms. Application form can be obtained by sending a request to the Principal along with a DD for Rs. 2100/- drawn in favor of the Principal. Duly filled in application along with the copies of the supporting documents is to be sent to The Principal, K. E. College Mannanam, Mannanam P.O., Kottayam-686561, by registered post within 30 days of this notification. Phone: 8590704501, Email: [kecollegemnm@gmail.com](mailto:kecollegemnm@gmail.com).

Mannanam  
12-06-2023

(Sd/-)  
Manager

**Shri Narsinha Shikshan Prasarak Mandal, Indoli**  
**Late. Ramrao Nikam B.Ed. College, Indoli**  
 At/Post - Indoli, Near Hutatma Smarak,  
 Tal. Karad, Dist. Satara-415 109 (Maharashtra)  
 (Affiliated to Shivaji University, Kolhapur)

**(Permanently Non-Grant Basis)**

**WANTED**

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Posts	Total Posts	Open Posts	Reserved Category Posts
<b>D</b>	<b>Assistant Professor:</b>			
1	Perspective in Education-Marathi Method	1	1	---
2	Perspective in Education-Hindi Method	1	1	---
3	Pedagogy Subject – Mathematics Method	1	1	---
4	Pedagogy Subject – Science Method	1	1	---
5	Pedagogy Subject – English Method	1	1	---

**Note:** For detailed information about post, qualifications and Other terms and conditions, please visit University **website:www.unishivaji.ac.in**.

Place : Indoli

**Chairman**  
**NSPM Indoli**

**MARY MATHA ARTS & SCIENCE COLLEGE**  
**Vemom P.O. Mananthavady,**  
**Wayanad, Kerala– 670645**  
**Manager: 9447410831, 04935 241087**

**SITUATION VACANT**

Applications are invited for the Posts of:

- Assistant Professor in Hindi : 1 post (PWD)
- Assistant Professor in Malayalam : 1 post  
(Community Merit)
- Assistant Professor in English : 1 post
- Assistant Professor in Mathematics : 1 post

Qualification as per UGC, Kerala Govt. & Kannur University Rules. Application forms can be downloaded from the college **website : www.marymathacollege.ac.in** and can be submitted in the office of the Manager, Mary Matha Arts & Science College, Mananthavady **within 30 days** from the date of publication of this advertisement.

**NB:**

- ✓ Applicants should enclose a DD for Rs.2500/- with the application form.
- ✓ 50% seats are reserved for community merit.

Place: Mananthavady  
 Date: 20.06.2023

**Manager**

**Shri Shahu Shikshan Prasarak Seva Mandal, Peth Vadgaon**  
**Shri Vijaysinha Yadav College, Peth Vadgaon,**  
**Tal. Hatkanangale, Dist. Kolhapur-416112**  
 (Affiliated to Shivaji University, Kolhapur)

**(Permanently Granted)**

**WANTED**

Applications are invited from eligible candidates for the following post:

Sr. No.	Name of Post/ Subject	Subject wise Vacant posts	Total Number of Vacant Posts	Total Reservation
<b>Assistant Professor</b>			10	ST-1 VJ(A) - 1 NTC-1 OBC - 5 EWS-1 Open - 1
1.	Botany	3		
2.	Physics	2		
3.	Chemistry	3		
4.	Zoology	2		

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

**Place :**

**Date :**

**Secretary** **President**  
 Shri Shahu Shikshan Prasarak Seva Mandal, Peth Vadgaon,  
 Tal. Hatkanangale, Dist. Kolhapur



**CENTRAL UNIVERSITY OF RAJASTHAN**

**NH-8, Bandarsindri, District Ajmer-305817 (Rajasthan)**

Advt. : R/F.148/2023/803

Date : 16.06.2023

**REQUIREMENT**

Applications are invited from eligible candidates in the prescribed format for appointment on the post of

**TRAINING AND PLACEMENT OFFICER** purely on contractual basis for a period of one year in Central University of Rajasthan.

Interested eligible candidates should send the duly filled Application Form in the prescribed format along with all relevant documents upto **July 08, 2023**. They should report at the University for Interview on **July 20, 2023 at 10.00 am**. For information regarding Posts, qualification, Interview Schedule, Application Form etc., please visit: **www.curaj.ac.in**

**Registrar**



**Shri Vasantrao Banduji Patil Trust's  
Appasaheb Birnale College of Education, Sangli  
Near Railway Station, Shinde Mala, Sangli  
(0233) 2313333, Fax - (0233) 2313333  
(Affiliated to Shivaji University, Kolhapur)**

**WANTED**

Applications are invited from eligible candidates for the following posts:

Sr. No	Name of Post	Total Posts	Open Posts	Reserved Category Posts
<b>A</b>	<b>Professor</b>			
1		02	01	01 (SC)
<b>B</b>	<b>Associate Professor</b>			
1		02	01	01 (SC)
<b>C</b>	<b>Assistant Professor</b>			
1		06	02	04 - ( SC-1, VJA-1. OBC-1, EWS-1)

**Note :** For detailed information about posts, qualifications and other terms and conditions, please visit University website: [www.unishivaji.ac.in](http://www.unishivaji.ac.in).

Place : Sangli

Date :

**President**  
Shri Vasantrao Banduji Patil Trust's  
Sangli

**Principal**  
Appasaheb Birnale College of Education,  
Sangli

**St. Peters Education and Welfare Society's  
St. Peter Degree College  
Diwanman, Vasai (W), Dist. Palgarh – 401202  
Minority Institution**

Applications are invited for the following posts from the academic year 2023-2024:

**Unaided**

Sl. No.	Cadre	Total no. of posts	Category
1.	Principal	01	OPEN
2.	Asst. Professor in Commerce	02	OPEN
3.	Asst. Professor in Mathematics and Statistical Techniques	01	OPEN
4.	Asst. Professor in Economics	01	OPEN

The above posts are open to all, however, candidates from any category can apply for the posts.

Reservation for women will be as per University of Mumbai Circular No. BCC/1674/1998 dt. 10<sup>th</sup> March, 1998 4% Reservation shall be for the persons with disability as per University Circular No. Special Cell/ICC/2019-20/05 dt. 5<sup>th</sup> July, 2019.

Candidates having knowledge of Marathi shall be preferred.

Qualifications, Pay Scales and other requirements are as prescribed by UGC Notification dt. 18<sup>th</sup> July, 2018 and Govt. of Maharashtra Resolution No. Misc. 2018/CR 56/18/UNI-1 dt. 8<sup>th</sup> March, 2019 and University Circular No. TAAS/CT/ICD/2018-19/1241 dt. 26<sup>th</sup> March, 2019 and revised from time to time.

The Government Resolutions and circulars are available on the **website: (mu.ac.in)**.

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

Applications with full details should reach the Trustee, at St. Peter Education and Welfare Society's St. Peter Degree College, At. St. Peter Educational Premises, Diwanman, Vasai (W), Taluka Vasai, Dist. Palgarh – 401202, **within fifteen days** from the publication of this advertisement at the college address as mentioned above. **This is a university approved advertisement.**

**Priti Academy Education Society's  
PRITI ACADEMY LAW COLLEGE**

Kalyan Murbad Road, Mharal - 421301

**MINORITY**

APPLICATION ARE INVITED FOR THE FOLLOWING POSTS  
FROM THE ACADEMIC YEAR 2023-24

**UN – AIDED**

Sr. No	Cadre	Subject	Total No. of Posts	Category
1	Principal	—	01	01-OPEN
2	Assistant Professor	Law	04	04-OPEN
3	Librarian	—	01	01-OPEN

The above posts are open to all, however, candidates from any category can apply for the post.

Reservation for women will be as per University Circular No. BCC/16/74/1998 dated 10<sup>th</sup> March, 1998. 4% reservation shall be for the persons with disability as per University Circular No. Special Cell/ ICC/2019-20/05 dated 05<sup>th</sup> July, 2019.

Candidates having knowledge of Marathi will be preferred.

“Qualification, Pay Scales and other requirements are as prescribed by the UGC Notification dated 18<sup>th</sup> July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R. 56/18/ UNI – 1 dated 8<sup>th</sup> March, 2019 and University Circular No. TAAS/ (CT)/ ICD/2018-19/1241 dated 26<sup>th</sup> March, 2019 and revised from time to time”.

The Government Resolution & Circular are available on the website mu.ac.in.

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

Application with full details should reach the TRUSTEE / SECRETARY, PRITI ACADEMY LAW COLLEGE, Kalyan Murbad Road, Mharal – 421301 within 15 days from the date of publication of this advertisement. This is a University approved advertisement.

Sd/-  
TRUSTEE / SECRETARY

**Adarsh Shikshan Sanstha, Beed**

**KALIKADEVI ARTS, COMMERCE AND SCIENCE COLLEGE**

Shirur (Kasar), Tq. Shirur (Kasar), Dist. Beed

**WANTED**

Applications are invited for the post of Assistant Professors with duly attested xerox copies of requisite documents for below mentioned posts within 15 days from the date of publication of the advertisement.

Sr. No	Name of the Post	Subject	No. of the post	Reservation	Status of Grant
1	Assistant Professor	Botany	01	ST-01, OBC-01	Grant-In-Aid
2	Assistant Professor	Zoology	01		

Details regarding educational qualification, research publication, experience, tenure, Pay Scale, etc are as per the norms specified by University Grants Commission, State Government of Maharashtra, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad (M.S.) from time to time.

A copy of the application submitted by the reserved category candidates to the Secretary of the institute should be sent to the Deputy Registrar (Special Cell), Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

4% posts are reserved for handicapped persons, 30% posts are reserved for women, 1% posts are reserved for orphans and 10% posts are reserved for economically weaker sections.

The requirement of 55% marks for post graduation has been relaxed to 50% for SC, ST and handicapped candidates.

Reservation of VJ, NT- A, B, C, D is interchangeable as per Reservation Act 2001(2004).

Note- T.A. D.A. will not be paid for attending interview.

**Address for the Correspondence**

To  
The Secretary,  
Adarsh Shikshan Sanstha, Beed,  
Tq. & Dist. Beed  
C/O. S.K.H. Medical College Campus,  
Shivaji Nagar, Beed- 431122

**SECRETARY**  
Adarsh Shikshan Sanstha, Beed,  
Tq. & Dist. Beed



# BHARATA MATA COLLEGE

THRIKKAKARA, KOCHI – 682021, KERALA

Phone: 0484 – 2425121, +91 8281303721

Email : principal@bharatamatacollege.in

## WANTED - ASSISTANT PROFESSORS

### No. BMC/TF/1(06)/2023 dated 26-06-2023

Applications are invited from eligible candidates for the following Assistant Professor posts in Bharata Mata College, Thrikkakara against permanent vacancies. Two vacancies are reserved for persons with benchmark disabilities mentioned in clause 34 of the Right of persons with Disability Act 2016 and G.O (MS) No.96/2021/HEdn. dt.15-02-2021. Scale of Pay, Qualification, Age, etc. will be as per the norms of the UGC / Mahatma Gandhi University / Government of Kerala.

Apply **online only** with a fee of Rs.2500/- **within 30 days** from the date of this notification. Hard copy of the filled up application along with relevant documents should reach the office of

The Manger, Bharata Mata College, Thrikkakara P.O, Kochi-682021, Kerala by Registered/Speed Post. For further details visit college website :

[www.bharatamatacollege.in](http://www.bharatamatacollege.in).

No	Subject	No. of Posts	Open Quota	Community Quota	Disability Quota
1	Botany	2	1	1	0
2	Chemistry	1	1	0	0
3	Economics	1	0	0	1*
4	English	1	0	1	0
5	Mathematics	4	2	1	1**
6	Physical Education	1	0	1	0
7	Zoology	1	1	0	0

(\*Visually Impaired, \*\*Hearing Impaired)

(Sd/-)  
Manager

## SHIKSHAN VIKAS MANDAL'S

SHRI S. H. KELKAR COLLEGE OF ARTS, COMMERCE & SCIENCE

Smt. Neerabai Jagannath Parkar Vidyanagari, Devgad, Dist. Sindhudurg, Pin – 416 613

APPLICATIONS ARE INVITED FOR THE FOLLOWING **CLOCK HOUR BASIS POSTS**  
FOR THE ACADEMIC YEAR 2023-24

### AIDED

Sr. No.	Cadre	Subject	Total No. of CHB Posts	Posts Reserved for
1	Assistant Professor	Geography	02	OPEN - 02
2	Assistant Professor	Commerce	03	OPEN - 03
3	Assistant Professor	Botany	01	OPEN - 01
4	Assistant Professor	Chemistry	03	OPEN - 03
5	Assistant Professor	Physics	01	OPEN - 01
6	Assistant Professor	Marathi	02	OPEN - 02

The above posts are open to all, however, candidates from any category can apply for the post.

Reservation for Women will be as per the University Circular No. BCC/16/74/1998 dated 10<sup>th</sup> March, 1998. 4% reservation shall be for the persons with disability as per the University Circular No. Special Cell/ICC/2019-20/05 dated 5<sup>th</sup> July, 2019.

Candidates having knowledge of Marathi will be preferred.

“Qualification, Pay Scales and other requirement are as prescribed by the UGC Notification dated 18<sup>th</sup> July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-1 dated 8<sup>th</sup> March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241 dated 26<sup>th</sup> March, 2019 and revised from time to time.”

Remuneration of the above post will be as per the University Circular No. TAAS/(CT)/01/2019-20 dated 2<sup>nd</sup> April, 2019 & University Circular No. CTAU/23/2021-2022 dated 25<sup>th</sup> January, 2022.

The Government Resolution and Circular are available on the website: mu.ac.in.

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

Application with full details should reach **THE PRINCIPAL, SHIKSHAN VIKAS MANDAL'S SHRI S. H. KELKAR COLLEGE OF ARTS, COMMERCE & SCIENCE, Smt. Neerabai Jagannath Parkar Vidyanagari, Devgad, Dist. Sindhudurg, Pin - 416 613, within 15 days** from the date of publication of this advertisement. This is University approved Advertisement.

Sd/-  
PRINCIPAL

**SHIKSHAN VIKAS MANDAL'S**  
**SHRI S. H. KELKAR COLLEGE OF ARTS, COMMERCE & SCIENCE**  
Smt. Neerabai Jagannath Parkar Vidyanagari, Devgad, Dist – Sindhudurg Pin – 416 613

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS  
FOR THE ACADEMIC YEAR 2023-24

**SELF FINANCE**

Sr. No.	Cadre	Subject	No. of Posts	Posts Reserved for
1	Assistant Professor	B. Voc. Hospitality & Tourism	02 F.T.	OPEN-09 SC-03 ST-02 VJ-01 NT (B)-01 NT (C)-01 OBC-05 EWS-02
2	Assistant Professor	B. Voc. Health Care	02 F.T.	
3	Assistant Professor	B.M.S.	03 F.T.	
4	Assistant Professor	B.Com. Banking and Insurance	03 F.T.	
5	Assistant Professor	B.Sc. I.T.	04 F.T.	
6	Assistant Professor	Organic Chemistry	02 F.T.	
7	Assistant Professor	Analytical Chemistry	02 F.T.	
8	Assistant Professor	Environmental Science	02 F.T.	
9	Assistant Professor	Physics Electronics	02 F.T.	
10	Assistant Professor	Mathematics	01 F.T.	
11	Assistant Professor	Economics	01 F.T.	
<b>Total Posts</b>			<b>24</b>	

Applicants who are already employed must sent their applications through proper channel. Applicants are required in account for breaks, if any, in their academic year.

“ **Qualification and other requirement are as prescribed by UGC Notification, dated 18<sup>th</sup> July, 2018, Government of Maharashtra Resolution No. Misc-2018/C.R.56/18/UNI-I dated 8<sup>th</sup> March, 2019 and University Circular No. TAAS/(CT)/ICD/2018-19/1241 dated 26<sup>th</sup> March, 2019 and revised from time to time.**”

Application with full details should be reach **THE PRINCIPAL, SHIKSHAN VIKAS MANDAL'S SHRI S. H. KELKAR COLLEGE OF ARTS, COMMERCE & SCIENCE, Smt. Neerabai Jagannath Parkar Vidyanagari, Devgad, Dist. Sindhudurg - 416 613** within 15 days from the date of publication of this advertisement.

Sd/-  
**PRINCIPAL**

**D.Y. Patil Education Society's**  
**D. Y. Patil Technical Campus**  
**Faculty of Engineering & Faculty of Management**  
**A/P. Talsande, Tal. Hatkanangale, Dist. Kolhapur**  
 (Approved by AICTE New Delhi, Govt of Maharashtra, DTE, Mumbai)  
 (Affiliated to Shivaji University Kolhapur) **DTE Code: 6780**

**WANTED**

Applications are invited from eligible candidates for the following posts (**ENGINEERING & MBA**):

Sr. No	Designation & Subject	Total Posts	Open Posts	Reserved Category Posts
<b>A. Professors (03 )</b>				
1	Civil Engineering	01	01	—
2	Computer Sci. & Engineering	01	01	—
3	Mechanical Engineering	01	01	—
<b>B. Associate Professor (11)</b>				
1	Civil Engineering	03	01	SC-1, VJ (A)-1
2	Computer Science & Engineering	03	01	SC-1, VJ (A)-1
3	Electrical Engineering	02	01	SC-1
4	Mechanical Engineering	03	01	SC-1, VJ (A)-1
<b>C. Assistant Professor (41)</b>				
1	Civil Engineering	08	03	SC-1, ST-1, VJ (A)-1,OBC-1,EWS-1
2	Computer Science & Engineering	10	04	SC-1, ST-1, VJ (A)-1,OBC-2,EWS-1
3	Electrical Engineering	07	03	SC-1, VJ(A)-1,OBC-1,EWS-1
4	Electronics and Tele comm. Engg	01	01	—
5	Mechanical Engineering	10	04	SC-1, ST-1, VJ(A)-1,OBC-2,EWS-1
6	Physics	01	01	—
7	Chemistry	01	01	—
8	Mathematics	02	01	SC-1
9	Professional Communication	01	01	—
<b>D.</b>	<b>Librarian</b>	<b>01</b>	<b>01</b>	—
<b>E.</b>	<b>Director of Physical Education</b>	<b>01</b>	<b>01</b>	—

**MBA**

<b>A. Associate Professor (01)</b>				
1	General Management	01	01	—
<b>B. Assistant Professor (03)</b>				
1	HR Management	01	01	—
2	Financial Management	01	01	—
3	Marketing Management	01	01	—

**Note:**

- For detailed information about posts, qualifications and other terms and conditions, please visit university website: [www.unishivaji.ac.in](http://www.unishivaji.ac.in).
- Apply giving full particulars **within 15 days** from the date of publication of this advertisement to the undersigned. The applicants are requested to fill up the prescribed application form available at College Office or on [foet.dypgroup.edu.in](http://foet.dypgroup.edu.in) and submit it at College office during working hours.

Place: Talsande  
Date: 20.06.2023

Dr Satish R Pawaskar  
Director

Dr A K Gupta  
Executive Director

Shri Raturaj S Patil, MLA  
Trustee

Dr Sanjay D Patil  
President

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2. Rajesh Bhaiyya Tope College of B. Pharmacy (UG & PG) Aurangabad

(Permanently Non-Grant)

### APPOINTMENTS

Applications are invited from the eligible candidates for the following posts, **within the 15 days** on the following address. For detailed information about posts, qualification & other terms & conditions, please visit **website: [www.bamu.ac.in](http://www.bamu.ac.in) & [www.shivatrusts.com](http://www.shivatrusts.com)**.

Post	Course/Subject	Post	Category of Post
Principal	Pharmacy	01	OPEN (01)
	Law	01	SC (01)
Professor	Pharmaceutics	00	SC (01) VJ-A (01) OBC (01) EWS (01) OPEN (02)
	Pharma Chemistry	01	
	Pharmacology	01	
	Pharmacognosy	01	
	Pharma Practice	01	
	Quality Assurance-PG	01	
	Pharmaceutics-PG	01	
Associate Professor	Pharmaceutics	02	SC (02) ST (01) VJ-A (01) OBC (02) EWS (01) OPEN (01)
	Pharma Chemistry	01	
	Pharmacology	00	
	Pharmacognosy	01	
	Pharma Practice	00	
	Quality Assurance-PG	02	
	Pharmaceutics-PG	02	
Assistant Professor	Pharmaceutics	00	SC (02) ST (02) VJ-A (01) NT-B (01) NT-C (01) NT-D (01) OBC (06) EWS (03) OPEN (06)
	Pharma Chemistry	00	
	Pharmacology	02	
	Pharmacognosy	01	
	Pharma Analysis	00	
	Quality Assurance-PG	02	
	Pharmaceutics-PG	02	
Assistant Professor	Law subjects	12	
Librarian	Library Science	02	
Physical Director		02	

S/d  
President  
Dr. Balasaheb Pawar

Date: 22/06/2023

Address: Shiva Trust's Educational Campus, Beed Highway Road, Nipani-Bhalgaon, Aurangabad 431007

Contact: Email: [ceo.shivatrust@gmail.com](mailto:ceo.shivatrust@gmail.com); Mob No. : 9371707012, 9420949989

## CENTRE FOR RESEARCHER TRAINING & ADMINISTRATION (CRTA) POST DOCTORAL FELLOWSHIP PROGRAMS

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- To provide unique opportunity to show originality, creativity, and productivity by young researchers which are essential to their success in future research careers.

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  - ❖ Structures
  - ❖ Functional and smart materials

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- **Specializations:**  
Finance, Organizational Behavior & HRM, Marketing, General Management

**Faculty of Commerce**

- **Specializations:**  
Commerce

**Faculty of Sciences**

**Chemistry, Biochemistry, Nanotechnology, Biotechnology, Microbiology & Botany, Material Science**

- **Specializations:**
  1. **Chemistry, Biochemistry & Nanotechnology:**

<ul style="list-style-type: none"> <li>❖ Microbial virulence/metabolic homeostasis/peptide chemistry and purification</li> <li>❖ Sensor, Photo and electrocatalysis</li> <li>❖ Organic chemistry/Energy Conversion applications</li> <li>❖ Membrane Technology, Sustainable energy materials</li> <li>❖ Nanocatalysis and Drug molecules-</li> <li>❖ Heterogeneous Catalysis/Electrochemistry</li> <li>❖ Gas sensors, Biosensors, Micropatterning, LASER Scribing, Microsupercapacitors, Energy storage devices</li> </ul>	<ul style="list-style-type: none"> <li>❖ Biomaterials, Nanomedicine, Biomedical Sciences</li> <li>❖ Fluorescent bioprobes/Nano mediated diagnostics</li> <li>❖ Organic Chemistry/Material</li> <li>❖ Organometallics, coordination chemistry, electrochemistry</li> <li>❖ Electrochemistry, Water splitting, Sensing</li> <li>❖ 2D quantum materials, Thermoelectrics, Blue Energy</li> <li>❖ Main Group Chemistry, Catalysis and Organometallics Chemistry</li> </ul>	<ul style="list-style-type: none"> <li>❖ Supercapacitor</li> <li>❖ Electrochemistry, 2D materials</li> <li>❖ Heterogeneous Catalysis Electrochemistry, CO2 catalysis, CO2 electrochemical conversion</li> <li>❖ Organic Chemistry/Nanocatalysis</li> <li>❖ Organic Chemistry/Photovoltaics</li> <li>❖ Material Chemistry/Energy Conversion applications</li> <li>❖ Organic Chemistry/ acoustic chemical reactions/ Feedback networks</li> <li>❖ Materials Chemistry/ Plasmonic and thermochromic Materials</li> </ul>
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  2. **Biotechnology:** Cancer Biology, Plant Abiotic Stress
  3. **Microbiology:** Industrial Microbiology / Biopolymers
  4. **Botany:** Botany (Plant Science)
  5. **Material Science:** Water Management, Organic (Metal Organic, Synthesis, Hydrogen Production, Energy Storage & Conversion, Bio-interfaces)

**Eligibility :**

- Candidates must have been awarded the Ph.D degree. Candidates with Provisional Degree Certificates are considered.
- Two research papers must have been published in Scopus/Web of Sciences after the award of PhD Degree
- Age limit: 25-35 years preferably • Relaxation of 5 years for SC/ST, Divyangjan "Persons with determination"

**Selection process:**

- Eligibility • Merit • Interview

**Compliance during the fellowship:**

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li>• Half Yearly progress report</li> <li>• Periodic Departmental Research Committee Report</li> <li>• Colloquium</li> </ul> | <ul style="list-style-type: none"> <li>• Research Paper Publications</li> <li>• Conference Presentations</li> <li>• Research Awards</li> </ul> |
|--|--|

**Duration of the Course:** 2 years

**Course starts from:** August 2023

**Note:** Applicants are advised to visit the website: <http://www.jainuniversity.ac.in> for detailed information about the above program. The last date for submission of on-line application is 22<sup>nd</sup> July, 2023.

**For Admission contact  
JAIN (Deemed-to-be University)**

Centre for Researcher Training & Administration

# 319, 25<sup>th</sup> Main, 17<sup>th</sup> Cross, J P Nagar 6th Phase, Bengaluru – 560 078. Mobile: 7090880819 [www.jainuniversity.ac.in](http://www.jainuniversity.ac.in)

## AIU Notification for Inviting Proposal for AADC

The Association of Indian Universities, an apex-level representative body of universities and other higher education institutions in India invites proposals with an Expression of Interest (EoI) from the member universities for its newly introduced scheme i.e. Academic and Administrative Development Centres(AADC) to be established in select member universities.

AADC is a pioneering initiative of AIU which aims at organizing short-term training and capacity-building programmes for the faculty members and administrative functionaries of Indian Universities and other HEIs. Introduced in 2022, AADC is envisioned to function in a similar manner to the UGC Human Resource Development Centers operating in different universities. The focus of these centres is to provide training to faculty for online/blended mode of teaching-learning, developing e-content and using technology for continuous assessment and evaluation and research collaboration along with programmes on effective management using technology in governance and administration of universities.

Since its launching in last year, 09 Centres were approved by AIU which are functioning well and organizing the training programmes. As a policy, AIU has planned to add 10 centres each year to the list till the desired number of Centres is established. The general terms and conditions of establishing AADC are as follows:

- AADC is to be established under the banner of AIU and be named as **AIU-..... University, Academic and Administrative Development Centre**.
- AIU-AADC will offer short-term programmes of varying duration aimed at continuous capacity building of the key stakeholders through online and in-person modes.
- The Centres are to be allocated to 10 selected member universities of AIU based on their interest and required infrastructure.
- Initially, seed money of **Rs. 2.00 lakhs** will be provided by AIU as one-time financial support to each centre. Thereafter, the centers will be functioning in self-financing and self-sustaining mode
- **Rs. 1.00 Lakh** will be provided at the beginning of the first programme and the remaining One Lakh will be released after receiving the utilisation certificate from the University.
- Each Centre will organise 10 programmes in an Academic Calendar year.
- AIU will also provide academic support in identifying resource persons, planning and designing the academic aspects of the courses. The details of the programme structure, duration, selection of themes, preparation of training materials and modules, resource persons will be decided on mutual consultation and cooperation with the host/concerned university.
- A report after each programme may be submitted to AIU for documentation and publishing in University News, A Weekly Journal of Higher Education.

The proposal may be sent to **Dr Amarendra Pani, Joint Director & Head, Research Division** through email: **researchaiu@gmail.com**. In case you need any further information, you may send your queries through the email ID mentioned.



## Guidelines for Academic & Administrative Development Centres (AADC)

### Introduction

As the third largest Higher Education (HE) system in the world, Indian HE not only caters to students in diverse locations across the sub-continent but also is in the process of achieving 50% GER by 2035. While this requires elaborate infrastructure in place and enabling policies of inclusiveness, there is a need to create pathways of continuous learning and updating of skills and new knowledge among faculty in order to make HE quality futuristic. The Human Resource Development Centres (HRDC) set up by the University Grants Commission and the AICTE Training and Learning (ATAL) Academy offer Faculty Development Programmes (FDPs) of varying durations for newly recruited as well as for mid-career professionals. In spite of these efforts, there is still a gap between the number of courses on offer and number of faculty to be trained. Further, there have been very few programmes for the upskilling of administrative staff in the HE system so as to prepare them for the changing e-governance requirements.

It is in this context that the Association of Indian Universities (AIU) proposes to set up Academic & Administrative Development Centres (AADC) in collaboration with universities across India. While the AIU will provide a seed money of Rupees Two Lakhs to set up the AADC, the programmes will be conducted on a self-sustainable basis.

### Objectives of AADC

- Provide continuous knowledge and skill acquisition and enhancement for faculty in order to contribute effectively to the changing landscape of HE
- Train administrative staff in higher education institutions with appropriate skills to adapt to emerging information technologies
- Prepare library professionals and other technical staff in HEIs to contribute to knowledge cum learning and research resources as per the global demands and the local needs
- Introduce research scholars to the principles of academic integrity and professional ethics

### Thrust Areas of AADC Programmes

The AIU-AADC will offer short term (one week) programmes aimed at continuous capacity building of the key stakeholders through online and in person modes. The thrust areas envisaged for the programmes include but are not limited to the following:

- Identifying the different components of online teaching and learning
- Designing e-content, open educational resources and adopting innovative in structural delivery models
- Mapping and matching pedagogies and technologies
- Exploring new knowledge domains
- Producing high quality and high impact research publications
- Identifying appropriate impact factor journals for submission of manuscripts for publication
- Preparing winning project proposals
- Addressing local needs and realities through research in sync with Scientific Social Responsibility (SSR)
- Integrating research and innovation in order to foster the entrepreneurial spirit among teachers and learners

*contd....*

- Reinforcing academic integrity and professional ethics
- Fore grounding innovation and start up ecosystem to train graduates to be job providers rather than job seekers
- Tapping CSR and philanthropy funding
- Adopting thrifty measures in resource mobilization and its optimal utilization
- Understanding and training of the e- governance models
- Using information and communication technologies (ICTs) in day-to-day administration
- Utilizing and enhancing teaching-learning resources with a view to make the library an information hub and knowledge house for the HEI
- Forging national and international research collaborations and industry linkages
- Fostering decentralization of administration with appropriate checks and balances
- Documenting best practices in teaching-learning, research and administration
- Creating quality benchmarks for the emergence of multiple levels of academic leadership
- Analysing ways of aligning institutional vision with local, regional, national and global needs in order to achieve the proposed goals of NEP 2020 as well as SDG goals.

### **Intended Participants**

The participants of the AADC programmes include entry level, mid-career and senior Faculty, Research Scholars, Educational Administrators, Information Professionals, Technical Personnel and Academic Leaders. Programmes are to be designed as 'level-wise ladder type' schedules for the various cadres of faculty members and administrators with specially structured programmes for Research scholar's

### **Financial Model**

The AIU will provide a seed grant of Rupees Two Lakhs to set up the AADC in selected institutions based on a competitive scrutiny of invited/ submitted proposals. The fee component presented by interested institutions should include the honorarium for resource persons, handouts and course material as well as the cost involved for providing boarding for the participants. The venue for hosting the training programmes as well as the subsidized accommodation provided to the participants has to be borne by the host university.

### **Operational Guidelines**

Every university/ HEI that wants to start an AADC will enter into an agreement with the AIU.

Every AADC will have an Advisory Committee headed by the Vice Chancellor as the Convener and will include a nominee from AIU, two members of the IQAC, two senior academics and two senior administrators as well as two external experts as Members. The Coordinator of the Centre to be nominated by the Vice Chancellor, will be the Secretary of the Committee.

An Annual Calendar of Programmes will be created and circulated widely among the AIU members and displayed on the institutional website.

- Every AADC will nominate teaching, non-teaching and technical staff from among its human resources.
- The Coordinator of the AADC will be a faculty member at the level of Associate Professor and above. The coordinator will be paid a modest monthly honorarium.
- Every AADC will also have earmarked space and infrastructure within the HEI.
- Every AADC will prepare and disseminate the reports of programmes conducted in the dedicated link on the institutional website.

# Association of Indian Universities

## AIU Academic and Administrative Development Centres (AADC)

### Structure for the Training Programs

**1. Proposed programs:**

(Not exhaustive, the university may add more programs upon the requirement)

**(i) Use of technology in-**

- a) Teaching learning/Pedagogy
- b) Research Collaboration
- c) Assessment & Evaluation
- d) University Governance & management

**(ii) Development of learning material and e-content**

**(iii) Enhancing student engagement using technology**

**(iv) Use of technology in-**

- a) University Administration
- b) Examinations
- c) Finance

**2. Duration of the Programme- 8-10 days**

**3. Frequency of Programme- 10 per annum**

**4. Resource Persons (Details and Contact No.)-Please engage the quality resource persons.In case the need is felt, AIU can suggest experts.**

**5. Mode of delivery- (Any of the following)**

- a) Face to face
- b) Online
- c) Blended

**6. Target Audience (No.) – Faculty/Administrators in university and colleges**

**7. Group Size- 25-30 approximately**

**8. Branding/Promotion of Programs through following social media channels would be appreciated-**

- a) Twitter
- b) Instagram
- c) Linked In
- d) Facebook

**9. TA/DA-To be borne by their respective Institute sending the trainees.**

**10. Infrastructure Availability shall be ensured in terms of:**

- a) Classroom (Smart/Conventional)
- b) Teaching Learning aid & equipment

**11. Reasonable Course Fees may be levied**

**12. Possibility of non-commercial collaboration may be explored with Industry/ EdTech Companies.**



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