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– Convocation Address

Let's Create Atmanirbhar Bharat Together

Announcement

Special Issue of 'University News'

A Special Number of the University News on the theme '*Transformative Higher Education for Atmanirbhar Bharat*' is being brought out in the Month of March, 2023.

The Special Issue will cover the articles of eminent educationists on the afore mentioned theme. Readers of the University News are also invited to contribute to the Special Number by submitting papers/articles on the above theme by **March 13, 2023**. The papers will be published in the Issue subject to the approval of the Editorial Committee of the University News. The contributions are invited on the following Subthemes:

Internationalization: Modes of Engagement

- Experience of Hosting International Students on Campus
- Modes of Sustainable Partnership ((Mr Mathew Johnston)
- Roadmap to Establish Office of Global Affairs

Minimum Government: Maximum Governance- What does it Mean for Universities

- Ideal Model for HECI
- Ranking & Rating Differential Harmony
- Autonomy: Issues and Concerns

Reforms for Holistic Education

- Promoting Outcome Based Learning
- Integrating Skills with Higher Education
- Innovative Assessment & Evaluation Techniques

Creating an Ecosystem for Research & Excellence

- National & International Collaboration to Boosting Research
- Ways to Create Research Ecosystem on Campus
- Innovative Methods & Skills for Impactful and Socially Relevant Research

Future of Education, Learning and Workplace

- Technology based Personalized Teaching-learning Models
- Changing Role of Teachers as Facilitators
- Preparing the Students for Future Jobs

Any Other Relevant Subthemes

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Gender and Higher Education in AcSIR

Sandhya Waddikar* and Praveen Sharma**

As recognized in National Education Policy –2020 (NEP—2020), the scheme of an across-the-board and multidisciplinary education would upkeep enhanced and enriched research. Gender parity is wide-ranging across research subfields at various levels. It is important to explore the reasons behind the reluctance of girls in choosing STEM. The present work is based on an in-house survey of CSIR labs; including gender-wise data related to student enrolment and performance in AcSIR during 2011-2020. The focus of AcSIR has been on conveying research opportunities in research fields not normally taught in academic universities. For AcSIR institutes included in this survey, it is remarkable that a noteworthy share of female students has been selected for various AcSIR programmes, which marks the distinguished achievement of CSIR in encouraging more women towards STEM.

It has been acknowledged that an approach to a better all-inclusive and multidisciplinary education will support enhanced and enriched research. The National Education Policy (NEP) 2020 (Ministry of Human Resource Development, 2020) aims to achieve a Gross Enrolment Ratio of 50% by the year 2035 from its existing level of 27%. It has stressed plummeting dropout rates and warranting universal access to education at all levels. The growth of the higher education sector in India has facilitated adaptations in the attitudes of families, particularly toward the education of women in Science, Technology, Engineering, and Mathematics (STEM). Still, gender parity persists in STEM across all disciplines at almost every level of education. The government, through the NEP, plans to constitute a 'Gender-Inclusion Fund' to build the nation's capacity to provide equitable quality education for all girls. Higher and Technical education of women in India plays a significant role in refining the growth and prosperity of the nation and is reiterated by Parmar and Modi (2016).

By affirmative action of introducing a supernumerary quota for girls, the Ministry of Education targets to increase the enrolment of girls which was 8% and 14% respectively in IITs and NITs in 2016-17 to 20% in 2020-21 as stated by Geethalakshmi et. al (2021). The authors state that gender disparity in engineering enrolment is quite substantial in India. Amirtham and Kumar (2021) discuss the issue of Gender disparity in STEM in higher education and argue that it is a matter of concern globally. They state that there is gender parity

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in almost all disciplines at under-graduation, post-graduation, and M.Phil. levels.

A report on Policy Implications (SSESS, 2017) brings out aspects of women in science- a gap in numbers between Ph.D. holders and women with Post-Doctoral research experience. The report discusses the extent of dropout among female students of science in higher education and research. Bal (2008) discusses that the loss/drop occurs during doctoral and postdoctoral periods. Sketchy statistics from a few prestigious institutions offering a Ph.D. in biology show that nearly 50% of the students enrolled are women. On average, the proportion of women faculty in these institutions is 25% and the trend is similar in other areas of natural sciences. Rain and Anand (2020) argue that women tend to withdraw from research after a doctorate or during a doctorate, even though the number of female research scholars is comparable to male research scholars. Cuevas et. al. (2022) state many facts related to women students in STEM. The paper discusses that in contrast to boys, girls will not choose engineering, even if their performance in STEM is good.

This article has attempted to analyse the enrolment and performance at higher education in India by surveying AcSIR as it is a newly constituted body and has managed to have access to the best infrastructure and unique human resources of CSIR.

The present work is based on a study (Aggarwal et.al. 2022 a & b), conducted by CSIR-NIScPR. This involved an in-house survey consisting of data compiled through self-designed questionnaires from the labs of the Council of Scientific and Industrial Research (CSIR) for Lab level input. CSIR being the largest premier Research and Development (R&D) Indian organization, covering diverse S&T areas was found appropriate for the study, especially for policy recommendations to bring gender parity in STEM. The aim of the study was to get the current status of women in STEM based on some parameters. Information was sought from the heads of the labs/representatives nominated by the heads. This information included data on the Academy of Science and Innovative Research (AcSIR) with 32 labs providing information (partial in some cases).

This paper is based on information collected from AcSIR institutes attached to CSIR labs and no information was collected for AcSIR academic centers outside CSIR. The data of students have

been analyzed on enrolment and selection of AcSIR students along with some other parameters on their performance.

AcSIR

Formed in 2011, AcSIR¹ adopted the mandate to create and train some of the best of tomorrow's S&T leaders through a combination of innovative and novel curricula, pedagogy, and evaluation. With CSIR's state-of-the-art infrastructure and unique human resources, the AcSIR was set up to work towards bridging the gap between academics and societal applications. It was formed to maximize the number of qualified researchers and professionals in interdisciplinary science and engineering areas fortified with innovation skills. The Academy thus uses the organizational facilities, scientific manpower, and other CSIR resources for training and exploration. AcSIR has been born mainly on the basis of CSIR, and yet, other national scientific institutions have been involved, with 38 CSIR Laboratories and 14 non-CSIR Institutes (AcSIR Associate Academic centres) as the academic campuses of AcSIR. The academic centres (non-CSIR) are spread across the length and breadth of the country with two centres in the North-east, 3 in NCR, 5 others in the north, and another 3 in the southern states of India. In addition, AcSIR has collaborative academic programs with other national and international educational institutions.

It focuses on imparting instruction and providing research opportunities in various research fields that are not routinely taught in regular academic universities in India. This aspect has also been emphasized in NEP 2020, which states that Graduate-level, master's, and doctoral education in large multidisciplinary universities, while providing exhaustive research-based specialisation, would also provide avenues for multidisciplinary work, in academic and government institutions as well as in industry.

AcSIR Headquarters is responsible for centralized administrative functions. At present, the Academy has around 2500 faculty members from CSIR Labs, and around 6000 students enrolled in various programmes, mostly in Ph.D. and in different integrated Dual Degree Programme (M.Tech. and Ph.D.), Integrated M.Sc.-Ph.D, M.Tech., M.Sc. and PG Diploma. AcSIR has awarded 476 PhD degrees in the Year 2021 in STEM, which is perhaps the

highest awarded by any Indian academic institution thus far. In 2018, AcSIR awarded 574 PhD degrees in STEM, which is the highest awarded by AcSIR in any year. AcSIR has so far awarded about 3300 PhDs while there are more than 6000 students enrolled for PhD degree in different faculties of STEM (noted from their AcSIR site)

AcSIR is enlisted in the Ministry of Human Resource Development (MHRD) website under ‘Institutions of National Importance’. AcSIR has been ranked 2nd in the overall SCIMAGO Institutional Rankings (2022), 11th by ‘Nature index’ (2021-22), and 18th “NIRF (2022) in the Research Category, among the academic institutions in India.

Results and Discussion

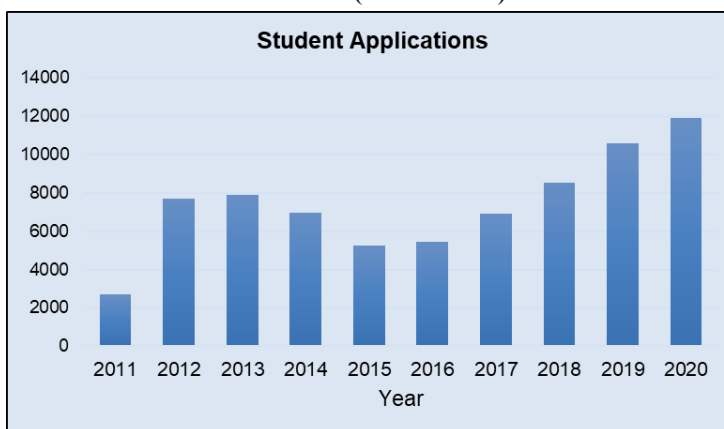
Data collected from 32 institutes of AcSIR pertained to the student applications and selections gender-wise from 2011 (the time of inception of AcSIR) until 2020. Some CSIR labs started the M.Tech. and/or Ph.D. programmes from 2011 while a few others began the programmes at later years. Accordingly, CSIR shared the information on AcSIR with us during the survey. Information on student applications for various courses during the time span of ten years, i.e., 2011-2020 is shown in figure 1. Gender-wise distribution of these students is given in figure 2, and figure 3 shows the selections of students gender-wise. In the year 2011 (when AcSIR) was set up, there were only a few CSIR labs that started the programme and very few students and hence fewer applications compared to the later years.

Although the overall female student applications have been lesser than the male students, the gap is slowly narrowing and more so, the gap between student selections gender-wise has reduced considerably. The overall proportion of selections of female students over the period 2011-2020 for these AcSIR institutes included in the survey has been 40%.

Further, these student applications and selections were analysed to see the trends in various science clusters (categorized by CSIR; 4 clusters were included in this study). Inferences drawn from this data reveal that:

1. In the Biological Sciences cluster (9 lab data), there had been more female student applications

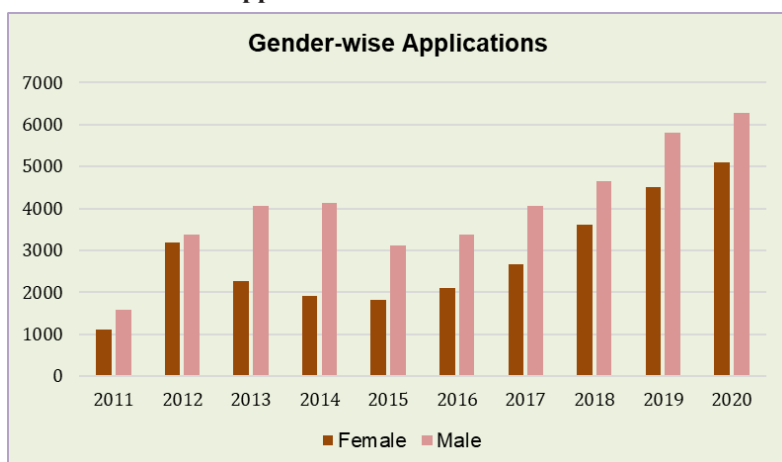
Figure 1: Total Students Applications during 2011-2020 (in numbers)



than those male students. Despite this, the proportion of female students was slightly lower in this cluster. In all other clusters, the average proportion of female student applications was about one-third of the total applications during the period 2011-2020.

2. In the Biological Science cluster of total applications, 52% were female students. However, of the total students selected, only 49% were females. 50% female applications or more were 8 institutes. Only one lab had 42% female applications for the 10-year period. However, 50% or more female students were selected by 6 institutes and the other 3 institutes selected 41% or less female students. Overall, this cluster had throughout the said period maintained the intake of female students above 41%.
3. In the Physical Sciences cluster (5 lab data) of total applications, 29% were female students. However, of the total students selected, 43% were females. Here all the institutes have female student applications of 40% or above, however, only 3 institutes have selected female students above 40%.
4. In the Chemical Sciences cluster (9 institute data) of total applications, 36% were female students. However, of the total students selected, about 39% were females. Here only 3 institutes have female student applications above 40%, and only these 3 institutes have selected female students above 40%. There has been a gradual rise in the intake of female students till the year 2018, with a decline thereafter.

Figure 2: Gender-wise Distribution of Student Applications from 2011-2020



5. In the Engineering sciences cluster (9 lab data) of total applications, 31% were female students (one lab data missing for this). However, of the total students selected, only 35% were females. Here only 3 of the institutes received female student applications above 40%, and only 3 institutes have selected female students above 40%.

For a clear depiction of all the parameters for which the questionnaire was administered, four institutes with responses close to substantiated were picked for highlighting the trend of the significant outcome which is depicted in figure 4. Figure 4:

Figure 3: Gender-wise Distribution of Student Selections (numbers)

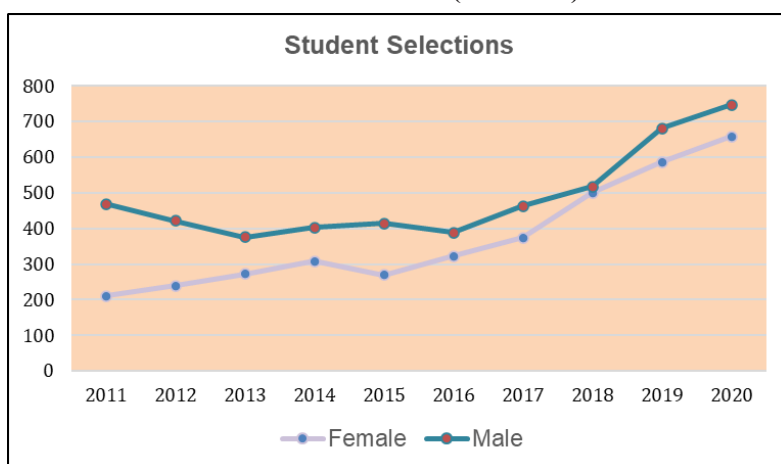


Table 1: Gender Parity Index of Select AcSIR Institutes (2011-2020)

AcSIR	SERC	CSMCRI	NCL	NIO	CECRI	NEERI	NBRI	IGIB	IITR
0.72	0.38	0.43	0.52	0.61	0.7	0.98	1.21	1.4	1.42

Student applications and selections of select institutes (2011-2020)

For a better understanding, the proportion of female to male students has been computed for 9 selected institutes to derive a Gender Parity Index (GPI). The GPI of these institutes are presented in table 1 (as reported by the labs in survey response).

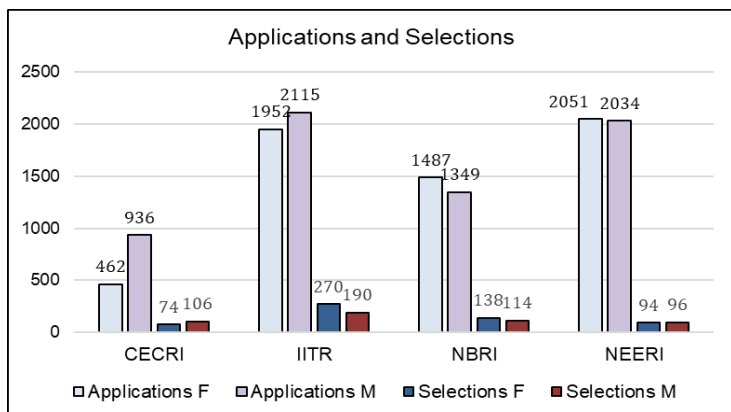
$$\text{GPI} = \frac{\text{Female student selections}}{\text{Male student selections}}$$

The overall GPI of AcSIR is less than one. However, it can be seen that all three institutes with index values of more than one are from the Biological sciences cluster. The other 6 institutes have values less than one, in which one institute has index value closer to one. It is noteworthy that this institute is from the Engineering sciences cluster. All the other institutes are from Physical sciences, Chemical sciences and one from Engineering. This clearly indicates that the Biological sciences institutes are higher on gender parity index while the other subject clusters may have to work on achieving gender parity.

The overall gender wise performance of the 32 institutes based on the students receiving scholarships, discontinuing and completing their Ph.D. programmes in these institutes is shown in figure 5. More male students have discontinued their Ph.D. programmes than female students and a similar trend is seen for students completing the programme. When the data is analysed cluster-wise, it is found that:

1. In all the four clusters considered for the study, more male students have discontinued their Ph.D. programs than female students.
2. Although female students selected in the Engineering sciences cluster were only about one-third of the total,

Figure 4: Parameters of All the Four Institutes



their performance was far better when it came to completing the programme. There was an equal proportion of the students completing their doctorates gender-wise.

- In the Biological Sciences cluster, more female students are recipients of scholarship than male students. Here, of all the students who had discontinued the doctorate programme, about 47% were female students.
- Of the total students getting scholarships in the Physical Sciences cluster, 48% were female students and only about 37% of students who discontinued the doctorate programme were female students.

Figure 5: Performance of AcSIR Students during 2011-2020

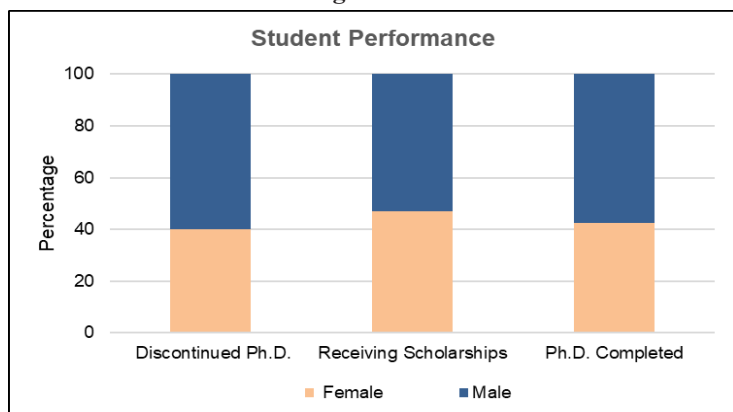


Table 2: Female Student Performance (in %) in Select AcSIR Institutes

Institute	CDRI	CECRI	IGIB	IIM	IITR	NBRI	NEERI
Discontinued	21	41	59	43	63	39	35
Scholarships	48	36	60	43	62	53	54
Completed Ph.D.	47	28	61	26	52	61	62

5. In the Chemical Sciences cluster, about 40% female students were recipients of scholarships. Almost the same proportion of students had completed the Ph.D. programme.

Few institutions with complete information on gender-wise students' performance have been selected as detailed in Table 2 (as reported by the labs in survey response).

A skilled workforce is in greater demand who have multidisciplinary abilities across the sciences, social sciences, and

humanities. AcSIR (under CSIR labs) has already taken several initiatives toward this direction and improving the quality of education. It is noteworthy that a significant proportion of female students have been selected for various AcSIR programmes. This achievement is a notable contribution of CSIR in drawing women towards STEM. This marks a magnificent endeavour as the Academy is a newly constituted body of CSIR.

The information by University Grants Commission on the percent female student enrolments in higher education during 2019-20 for all subjects is 49% while that for Ph.D. enrolment alone during the same period is 45%. This applies even in the current study for the AcSIR (institutes under study) which has shown female student enrolment for 2019-20 at approximately 45%.

The complex and multi-layered gender relations in wider society impact females' access to STEM higher education and employment. It is imperative to have additional initiatives and programs at the government as well as the private level to encourage women to enter and stay in STEM fields. Providing quality higher education opportunities to all individuals is among the highest priorities as per NEP and AcSIR has been trying to achieve it by filling up the gender gap along with

raising the education standards in a very short span of time.

Acknowledgments:

This paper is derived from a report published by CSIR-NIScPR - “Women in STEM: A CSIR Survey towards Gender Parity”, based on an in-house study. The authors are in debt to the Director of the institute, Prof. Ranjana Aggarwal, for encouraging her to take up the study. We would like to thank all the CSIR labs that participated in the survey and provided their valuable input for our study. Our special thanks are due to our former colleague and an expert in the field of gender studies, Dr. Neelam Kumar for her valuable input while drafting the manuscript.

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Endnotes

- 1 Most of the information pertaining to AcSIR has been obtained from the AcSIR website <https://acsir.res.in/about-us/> as well as some information has been compiled from some CSIR labs websites pertaining to AcSIR accessed between 19th to 23 September 20. □

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

Prospects and Challenges of National Education Policy—2020 in Higher Education

Sangeeta Jauhari* and Kavita Indapurkar**

Presently, the education system in India is just an extension of what was introduced during the colonial era. Over the decades, this has lost its applicability and did not match the quality and standards comparable to education that was brought in by other countries of the world. Research over the decades in India and around the world identified that education has a larger perspective of providing students with the art of leading a conscious life on one hand and at the same time should cater to the predetermined livelihood goals of the aspirants. At the same time, it should match with the education system of the countries around so that there is a seamless movement of the students to gain education from any country around the world. Through NEP the regulators in India brought in the ways so that the traditional wisdom is restored and at the same time quality and standardized education that is comparable to other countries of the world also prevails.

The present paper attempts to explain how the new education policy can be a step towards realizing its goals and also identify some of the important challenges that would be confronted while adopting and implementing NEP in its full spirit and essence.

One thing that made us different from all other creatures on the earth is our power to process knowledge, analyse and apply the same towards setting new benchmarks for self. Human beings are the only living creatures on earth to have progressed from being uncivilised to getting civilised (Kavita Indapurkar, 2020). In very simple terms knowledge may be termed as not only being aware or familiar but also developing the conceptual understanding of a phenomenon. It can be acquired not only when it is passed over from someone who knows to someone who does not but can also be acquired by one's own

experience, learning, perception of surroundings, or discovery. (Kavita Indapurkar, 2020). Education provides its aspirants with the art of living that includes livelihood as one of the aspects, but over the years education has become just a tool for livelihood. Presently the world is undergoing rapid changes in the knowledge landscape with the availability of technology in the hands of the common man. With the intervention of advanced technology, the world has become a global village which in turn has opened the dimensions of learning and knowledge sharing at a large scale. Therefore, the need is to adopt a system that is comparable with the world and helps our young population to compete with those that are best in the world. With this aim being very clear we need to map our country's goal with our knowledge-sharing mechanism that is reflected through our education system. The need is to put emphasis more on comprehension and application rather than just knowing the facts. The highest education is that which does not merely give us information but makes our life in harmony with all existence (Rabindranath Tagore).

The prevailing education system has its roots in the thought process of our colonizers who wanted to create mass workers, which was tweaked later at our own convenience after the independence. The goals of education could not match their aspirations and the gap between education and skill has widened. Researchers believe that when educated people, are not resilient enough and collapse, or get misguided to mass destruction or give up their lives, it is the failure of the education system. Researchers consider that this shows the mismatch between what education gives and what is desired. The rigidity of the education system pushes the students to become hardcore domain-specific, which may be one of the reasons for the same. For example, an engineer is expected to be an engineer and finds livelihood through it though is unable to learn enough life lessons that are required to live a quality life. These life lessons may be around financial literacy, literature, or spirituality. The sustainable development goals adopted by India in 2015 aim at

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ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all. Realising this a need to revamp the education system was prompted. NEP is a step towards it.

Inclusion of Holistic thought in NEP- 2020

The NEP- 2020 calls for key reforms in both school and higher education that intends to prepare the next generation to thrive and compete in the new digital age. Recognizing the needs, there is much emphasis on a multi-disciplinary approach, digital literacy, written communication, problem-solving skills, logical reasoning, and vocational exposure to the students proposed to be included in the curriculum.

Outcome Based Education

It is suggested out of research that a pre-defined outcome motivates the teacher and the learner and therefore is proposed to be adopted at the course level as well as at the programme level. These outcomes can also be mapped to get the specific courses and activities that would be useful in achieving the pre-decided goals of the programme. This is a systematic and structured approach that focuses on the needs and goals of learners and would also lead to greater engagement and motivation for students. It provides clear and measurable learning objectives, that allow both students and teachers to track progress and adjust pedagogy as per the needs of the students. This approach would help in a more industry-ready workforce.

Flexible Approach

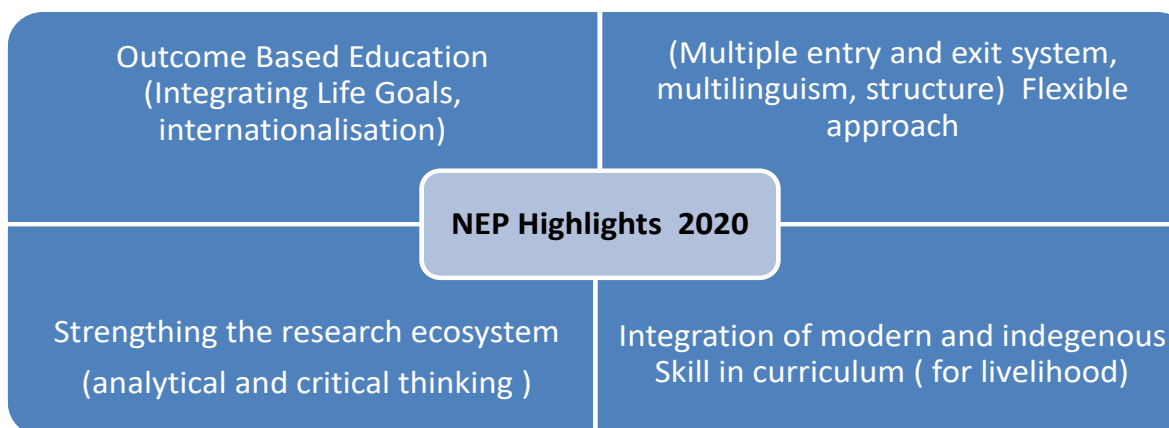
Instead of a stringent unbending approach, that has led to broken aspirants, the policy gives

flexibility in terms of, the use of language to learn, timings, choice of skills, and multiple entry and exit to cater to the individual issues and problems of the students. A flexible approach would allow students to progress at their pace and tailor their education/ training to their individual career goals. This can make education more accessible to individuals with different learning styles, work schedules, and life circumstances. Additionally, it can attract employers and retain diverse talent.

Research Ecosystem

The research ecosystem helps to improve the quality of education by providing evidence-based practices that can be used to improve student outcomes, teacher effectiveness and policy making. Instead of rote approach, the policy puts in place the ways in which analytical thinking and critical thinking skills of the students can be improved and they can be led to an innovative and enterprising attitude in their career and progression. Such youth would also be instrumental in finding solutions to our indigenous problems and increasing productivity and prosperity at the individual and at the national level. The research acumen developed by the students would empower the policy-making institutions in not only developing the practical policy initiatives but also their successful implementation. Developing research acumen can also be used as a skill among students that can help them gainful employment. An effective research ecosystem in education can benefit all of us in several ways:

- *Improving Student Outcomes:* Research helps to identify best practices and effective interventions that can improve student achievement, engagement, and well-being.



Source: Authors' ideation

- *Personalized Learning*: Research can help to identify students' individual needs and develop personalized learning strategies that can better support their learning and development.
- *Closing Achievement Gaps*: Research can help to identify and address the root causes of disparities in student outcomes, which can lead to more equitable opportunities for all students.
- *Preparing Students for the Future*: Research can inform the development of curriculum and instruction that can better prepare students for the industry-ready workforce and adapt according to future opportunities.
- *Supporting Teachers*: Research can help to identify effective teaching strategies, professional development opportunities, and resources that can support teachers in improving student outcomes.
- *Evidence-based Policymaking*: Research can inform policymaking at the local, state, and national levels, which can lead to more effective and equitable education and other policies.

Including Skills in the Curriculum

Including skill development in the education system is another important and relevant proposal of NEP-2020. By including skills in the curriculum, students can learn how to apply their knowledge and develop the competencies they will need to succeed in the future. It is out of the research that it has been realised that even our engineering graduates are unemployable due lack of skillsets in them. Including learning objectives and achieving them will require including courses and activities that develop skill sets among the students to get gainfully employed. Such an environment at the institution/university level would also help students understand the requirement of industry and will make students aware of their learning in the real-world context. Development of skills such as critical thinking, problem-solving, and collaboration can be applied across a wide range of subjects and in various real-world contexts. Skills-based instruction methods can be more engaging for students, as it often allows them to work on projects and activities that are helpful in developing their interests and passions. Skills-based instruction can also empower students to take ownership of their learning by giving them the opportunity to set goals, make decisions, and reflect on their progress. Developing skills such as

teamwork, communication, and adaptability would make students better equipped to succeed in a rapidly changing job market.

Implementation Challenges

Any change has its own challenges as far as its implementation is concerned. Some of the challenges are about the management of change while others are about mindset issues. When a change is to be adopted for some system that is decades old and is to be comprehensively adopted over a large area, it can be very well imagined how mammoth the task is to implement the change. Some of the likely challenges that are to be dealt with can be listed below.

Awareness among Stakeholders

With NEP- 2020, this is the time for revamping the entire education system 360 degrees so that the various dimensions of the policy can be implemented. All the stakeholders should be made aware of the same and this would be the biggest challenge for a country like India that is not only big in the area but has quite a heterogenous population, in terms of culture, mindset, level of quality of life, and so on. The first step is to make students, parents, HEI's Management, and above all the teaching fraternity aware of the basic rationale of NEP and how it can be useful and helpful in shaping the futures of the students. The issues related to implementation for the holistic development of an individual seeking knowledge and wisdom should be discussed regularly and research should be promoted in this area.

For any new concept to adopt it is important to spread awareness of that at mass levels and at a multidimensional level. Since the time the policy has been introduced, the policymakers are trying their best to disseminate the information through institutions to heterogeneous groups including students, parents, and industry, however, spreading awareness is an ongoing process and it takes time to seep in among the people at large in its full spirit and essence. Thus, it is important to Speed up the awareness drives among all stakeholders like parents, students, and industry and for this, the need is to adopt the multidimensional approach in which the specialized teams should be nominated for different groups at different levels.

Resource Availability and its Deployment

The implementation of NEP-2020 requires the pooling of resources in the first place. For

this purpose, the one big challenge is to have the resources to cater to the diversity in academics. These resources may be teaching resources for various skills suggested in the document like yoga; traditional wisdom, etc., labs and hardware for skill development, software labs, etc. HEIs would face problems in arranging appropriate facilities, advanced labs, rich intellectual capital, and other such resources to impart the quality and diverse education in full spirits and essence that NEP 2020 intends to bring forth. Another challenge would be the availability of expertise to prepare guidelines for field-based education; community engagements; project-based work and other such diverse academic interventions.

Resources are always scarce. The present era is the era of connection and collaboration wherein the resources are pooled to achieve objectives. For this PPP model has been successfully used across the globe. The author suggests using PPP model should be used in the education sector to overcome the challenge.

Progression and Industry Acceptability

With the changes in the education framework, the industry would also need to reciprocate in the form of a change in demand for skillset/education qualifications of the workforce to be employed. The challenge would also be in aligning the industry-academia interface with a bi-directional approach so that the students are more industry-ready to be absorbed.

One of the key thrust areas of NEP- 2020 is to encourage high R&D investments from the government and private sectors. This will encourage innovation and innovative mindsets. To facilitate the same, there is a need for a strong industry commitment and close intervention with academia for industry-led skilling / up-skilling/ re-skilling. This idea is proposed to be executed through apprenticeship-embedded programmes. This looks good in theory but requires a lot of commitment by both industry and academia to execute.

The industry-academia have to join hands and accept each other's importance in shaping the future of the youth and the country. Regular interaction between industry and academia will lead to a concrete action plan in view of the policy guidelines. The academia should be liberal enough to accept and

adopt the innovative models that are put forward by the industry to achieve the desired objective of NEP 2020.

Political Challenges

There is still a need to realize the relevance and importance of NEP as a policy of the country by rising from the party lines. A political angle has been brought into the new framework for vested low levels of interest due to which many states have not adopted the NEP2020. As education is on the state list, it is conveniently not adopted by the states governed by other political parties. However, at the national level, academicians need to evaluate and make the stakeholders aware of the NEP-2020 so that it can be implemented in its full spirit and essence.

Resistance to Change

National Education Policy 2020 is a policy based on the pillars of access, equity, quality, affordability, and accountability, the aim of which is to produce millions of skilled workers, entrepreneurs, innovators, and researchers. Implementation of the policy is expected to be Student-centric, creative-centric, innovation-centric, and research-centric. Implementing this in its full spirit and essence is a challenge in itself.

Change is the law of nature and each of us needs to adapt and adopt a change to be successful in the dynamic world. Change in the education system would require a lot of deliberations and discussions at various levels and therefore enough time and patience are expected before it is implemented.

Conclusion

We are all human beings and are known to be resistant to change. It is very difficult to change the mindset of academicians and parents as well as the management of higher education when it comes to the shift in the education system that is more than a century old. We all feel comfortable and abide by the traditional method of teaching and learning and are happy to produce manpower for white-collar jobs, without realizing the macro changes in the job market, economies around the world, the requirement of the industry, innovations in the theories of management, innovation in technology to mention a few. At the same time, there is a deterioration of ethics and a departure from the traditional value system. There is

a need to nurture technical creativity and innovation skills and the same time develop manpower that is more sensitive toward the human value system. Therefore, India cannot afford to carry on with the age-old education system and NEP 2020 can be seen and evaluated considering the same.

At the societal level, higher education must enable the development of an enlightened, socially conscious, knowledgeable, and skilled nation that can find and implement robust solutions to its own problems. Higher education must form the basis for knowledge creation and innovation thereby contributing to a growing national economy. The purpose of quality higher education is nation-building, rather than just the creation of greater opportunities for individual employees.

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Educational Thoughts of the Mother (Mirra Alfassa) (1878-1973)

Sunil Behari Mohanty*

The Mother (Mira Alfassa) of Sri Aurobindo Ashram, Puducherry as the founder of the Ashram and its Centre of Education, was involved in the education of children and started writing on various aspects of education. She coined the term Integral Education, which covers five aspects- Physical, Vital, Mental, Psychic and Spiritual.

Life of The Mother (Mirra Alfassa)

The Mother was born on 21st February 1878 in Paris, France and had the name Mirra (or Mira) Alfassa. Her mother Mathilde Ismaloun was a Jewish Egyptian, and her father Maurice Alfassa was a Jewish Turkish national staying in France. After finishing school, she studied painting in an art studio and took part in an art exhibition. Indications about her spiritual journey appeared from age 5 – lapsing into bliss, going into trance, etc. In 1901, Mirra joined *Le Mouvement Cosmique* founded by the Polish occultist Max Theon and his wife. In 1905, she founded *l’Idée*, a group of seekers, who met at her house. In 1905 she went to Algeria to study occultism with Theons. In 1910, Paul Richard, her husband came to Pondicherry, on a political mission and met Sri Aurobindo. On return to Paris, he informed his wife Mirra about Sri Aurobindo and his philosophy. on 29th March 1914, Paul and Mirra came to Pondicherry and stayed for a year till 22nd February 1915, when they were compelled to go back to France because of the First World war.

Before coming finally to Puducherry on 24th April 1920, Mirra spent 4 years in Japan. Between 1920 and 1926, Mirra got herself increasingly involved in organising the Ashram of Sri Aurobindo and during this period, she was named The Mother, by Sri Aurobindo. On 24th November 1926, Sidhi day, Sri Aurobindo started withdrawing from external activities leaving the responsibility of the Ashram to The Mother.

At Pondicherry, her first accommodation was

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at Magry’s Grand Hotel d’Europe at 12 (now 28) Rue Suffren. In June 1914, she shifted to Magey’s Grand Hotel at 7 Rue Dupleix (Now 13 J.N. Street) (This building is now part of the Ashram and has the Ashram Archives Dept. office and library). Due to the first world war, she went to Japan and from there returned to Pondicherry on April 24, 1920, and stayed at Grand Hotel de Europe, Subu House at 12 (now 15) Rue St. Louis; Bayond House at 4 (Now 5) Rue St. Martin and from November 24, 1920, stayed at the same building in which Sri Aurobindo lived. Before her passing on September 17, 1973, she stopped coming out on March 18, 1962. Before this day, she used to give darshan every morning on the Balcony and come out and take classes and play tennis and take part in other activities. After the morning Balcony darshan was stopped, she used to give darshan on the terrace on 4 darshan days- February 21 (Her birthday), February 29 (Supramental manifestation day), April 24 (Last date of arrival at Pondicherry), August 15 (Sri Aurobindo’s birthday) and November 24 (Sidhi day).

Thoughts on Education

True Education

According to The Mother, true education must reveal what is already present in the developing beings and make it blossom (The Mother 2002, p. 335)

Yoga Education

Yoga, according to The Mother, is an essential element of general education. This is more important than the formal subjects of instruction. This can make the process quicker and easier. The Mother suggested that the Government should recognise yoga as education. It shall yield much dividend. On December 11, 2014, United Nations resolved to observe the International Day of Yoga. Since 2015, it is being observed on June 21 (Mohanty 2016). Generally in non-Indian culture, yoga word is actually limited to yoga exercises for mainly physical development.

Integral Education as an International System

According to The Mother, there is a necessity of assimilating the material knowledge of the west with spiritual knowledge (The Mother 2002, p. 249). There may be an integral education, with some variations, that can be adapted to all the nations of the world. This would bring back the legitimate authority of the Spirit over a matter fully developed and utilised.

Integral Education for Human Unity and International Understanding

As discussed earlier, the principles of integral education are international in nature. They touch the inner elements in man that realise Vasudhaiva kutumbakam. This leads to the unity of all nations. It is the compelling future of the world (The Mother 2002, p. 250). Thus, education has a definite role to play in educating the budding citizens of various countries for the realisation of this ideal. According to The Mother, unity of humans can be achieved neither by uniformity nor by domination and subjection, but by a synthetic organisation of all nations, each one occupying its true place according to its own genius and the part it has to play in the whole. To make this synthesis a living one, the grouping should be effectuated around a central idea that is as wide and as high as possible, in which all tendencies, even the most contradictory, may find their respective places. Education has a positive role to play in facilitating world union by making the children accustomed from an exceedingly early age not merely to the idea itself, but to its practice (The Mother 2002, p. 40). The formation of an international institution for imparting education at Puducherry is a step towards the achievement of this ideal. The attempts of The Mother to educate people about human unity and international understanding include the creation of Auroville - a city of the future humanity, where people belonging to different nations and faiths would live a higher life that has spiritual principles as its base. Integral education has been said to be the future system of education. The world trends in education are moving towards that ideology.

The Mother stated that the Government of India should recognise Yoga as education (The Mother 2002, p. 252). The true role of India lies in taking education away from stress on success, career and money to spirituality (The Mother 2002, p. 251). She must pave the way by making matter ready for

the manifestation of the spirit. This truth must be contained in the Indian educational policy.

Education for National Integration

National education is a must for national Integration. To develop human unity and international understanding each nation must first realise its own unity (The Mother 2002, p. 250). India as a nation is very old. Spiritual India is an undivided India, she has a soul. The parts constituting this undivided India have the same consciousness. The country's unity has been threatened at times, but the unity is the reality since this country must rise to become the leader of the world. Its unity is an assured fact. The integrity of a nation is threatened by differences due to languages, religions, regions, and communities. The Mother has suggested simplified Sanskrit to be the national language. All other differences can be solved when spirituality becomes the base of education.

Psychology & Mental Education

Development of the Power of Concentration

According to The Mother, the faculty of concentration can be developed through conscious control of the energies (The Mother 2002, p.258). It can be developed systematically in the same way as an athlete develops methodically his/her muscles through scientific and gradual training. It can be developed in such a way that concentration is obtained at will and on whatever subject or activity is chosen. To achieve this ability, one needs to be determined and persevering (The Mother 2002, p. 259).

Development of Direct Mind to Mind Communication

According to The Mother, directly projected thought is more powerful than the words that express it. When one is truly in the realm of thought, words diminish the meaning. They reduce, limit, harden, and take away the suppleness and true strength – of life. There is a necessity for developing communication skills from one mind to another without taking recourse to words (The Mother 2003a, p.95). In ancient India, teachers transmitted knowledge to their students through a direct mind-to-mind communication process.

Development of Mental Silence

According to The Mother, the mind can be a

better instrument only when it can be made quiet and silent. There are four principles that must be followed in developing mental silence. These are: 1. To talk as little as possible; 2. To think just of what one is doing at the moment and not of what one has to do or of what one has done before; 3. Not to regret what is past or imagine what will be; and 4. To check pessimism in one's thoughts as much as one can and to become a voluntary optimist (The Mother 2002, p. 141). According to Sri Aurobindo, in order to improve performance of the mind, it is necessary to ensure the mind's immobility and thought-free stillness. Truth is seen well in the purity of the silence. It requires identity and silent vision. It cannot be realised in the noise and cackle of logical debate (Sri Aurobindo 1997c, p.255)

Development of the Will Power

Willpower can be developed in everyone. According to The Mother, this grows through regular training and exercise (The Mother 2002, p. 137). To educate willpower, one needs to exercise it as one exercises the muscles by using them.

Development of Plasticity

According to The Mother, the human mind is generally limited in its vision, narrow in its understanding, rigid in its conceptions (The Mother 2002, p. 5). There is a necessity of continuous progress and widening of human mind to make it more supple and profound. In order to be effective, it has to progress constantly, revise its notions in the light of new knowledge, enlarge its framework to include fresh notions and constantly reclassify and reorganise its thoughts, so that each of them may find its true place in relation to the others and the whole remain harmonious and orderly (The Mother 2002, p. 27).

Development of Personality

According to Sri Aurobindo, memory is the basis of personality. The individuality or difference of personality is originally created by difference in the nature and range of the impressions experienced and retained by the mind, which naturally results in different habits of emotional and mental reaction. There are differences in human personality because of difference in the range of mental and emotional experience, from the different distribution of various kinds of experience, and from differently developed

habits or ways of reacting to impressions received. For character is nothing but a habit, and habit is nothing but an operation of the memory. The difference in experience depends on the difference in life, pursuits, and occupations (Sri Aurobindo 2003b, p. 289).

Development of Genius

According to The Mother, everyone must strive to make the genius in oneself come out. (The Mother 2003b, p.396).

The Process of Mental Education

According to The Mother, there are five phases of a true mental education. These are: 1. Development of the power of concentration, the capacity of attention; 2. Development of the capacities of expansion, widening, complexity and richness; 3. The organisation of one's ideas around a central idea, a higher ideal or a supremely luminous idea that will serve as a guide in life; 4. Thought-control, rejection of undesirable thoughts, to become able to think only what one wants and when one wants; and 5. Development of mental silence, perfect calm and a more and more total receptivity to inspirations coming from the higher regions of the being. These phases may follow one another or may alternate and proceed simultaneously (The Mother 2002a, p.24). According to The Mother, intellectual culture strengthens the mind and turns its concentration away from the impulses and desires of the vital (The Mother 2002, p.133). It is indispensable for preparing a good mental instrument, large, supple, and rich. However, on many occasions, in rising above the mind, it is more often a hindrance than some help. for, in general, a refined and educated mind finds its satisfaction and rarely seeks to silence itself to be surpassed (The Mother 2002a, p.139). The Mother gave stress mental education. According to her, every human being possesses knowledge and intelligence, which are precisely the qualities of the higher mind in man. These qualities differentiate man from animal. Hence, mental education plays a vital role in developing efficient human beings (The Mother 2002, p.138). In order to express the Light, the mind needs special education and training of the human brain. She compares the functioning of the immature human brain with that of a musical instrument with most of its notes missing, and that produces a rough approximation but not something

precise. It is not necessary if one wants to escape from life and go into inexpressible heights, as some *rishis* in Vedic periods used to do, but it is indispensable if one wants to express his/her experience in outer life (The Mother 2003b, p.401).

Learning Starts at Pre-Birth Stage

According to The Mother, the founder of the Sri Aurobindo International Center of Education at Pondicherry, India, education of the individual starts from the moment a child is conceived in a mother's womb. According to The Mother, the founder of the Sri Aurobindo International Center of Education at Pondicherry, India, education of the individual starts from the moment a child is conceived in a mother's womb. According to her, "the nature of the child to be born depends very much upon the mother who forms it, upon her aspiration and will as well as upon the material surroundings in which she lives" (The Mother 1951, p. 11). Mohanty (2012, p. 328) mentioned an example of learning at the pre-birth stage reported in The *Mahabharata*, a mythological epic of Hindu religion. The story states that during the Mahabharata war, Kauravas challenged the Pandavas to destroy their *Chakrabyuha* (wheel-like placement of soldiers). On that day, Arjuna, the warrior from Pandavas, who knew the technique of penetrating *Chakrabyuha* was busy elsewhere in another fight. In such a defeat like situation, Arjun's fourteen-year son Abhimanyu stated that he had remembered the technique of entering the *Chakrabyuha* but did not know the technique of coming out from *Chakrabyuha*. He had learned this technique, while he was in his mother's womb, by listening to his father's narration to his mother. The Pandavas, hoping that Arjuna, Abhimanyu's father, could come back before evening and take out Abhimanyu from *Chakrabyuha*, appointed Abhimanyu as commander in chief for the day. Abhimanyu could enter the *Chakrabyuha*, but could not be saved, as his father could not reach the venue of the war in time. The story illustrates Indian thinking on the link between the nature of a child and his / her mother's nature. It is for this reason, in the ancient Indian system utmost respect was given to a pregnant lady and her way of living. The Indian concept of education of a child from the moment of its conception in a mother's womb goes on through the education of the concerned mother. This concept of learning in the womb has started drawing the attention of the educationists of the West. In 2008, the Early Years Framework document

of the Government of Scotland of UK defined early years as pre-birth to 8 years old and recognized the "importance of pregnancy in influencing outcomes and that the transition into primary school is a critical period in children's lives." (Scottish Government 2008, p.3). Learning and Teaching Scotland (2010, p.15) stated that "Babies start to learn in the womb, particularly in the last trimester. They are born able to recognise familiar sounds and they have already developed some taste preferences." In recent times, there have been some Western studies reporting close relationship between the lifestyles of pregnant mothers and the qualities seen in their babies. Enlightened parents carry out appropriate spiritual strategies that facilitate the spiritual development of their babies.

Spiritual Education

Spirituality is often taken as other name of religion. Many universities and education institution term their religious programmes as spiritual programmes. The United States has a Consortium for Spirituality in Higher Education, which is the umbrella for: 1. The Initiative for Authenticity and Spirituality in Higher Education (IASHE), 2. Education as Transformation (EasT), and 3. The Community for Integrative Learning and Action (CILA) (Astin, 2004, p. 38). Many educationists view the term "spiritual" as identical to the term "religious." According to Belousova (2002), spiritual development strategies enable students and teachers to experience the deeper truths of existence. In 1993, in the United Kingdom, activities for spiritual development in students suggested by the National Curriculum Council (1993, p. 3) were: 1. Recognizing the existence of others as independent from oneself; 2. Becoming aware of and reflecting on experience; 3. Questioning and exploring the meaning of experience; 4. Understanding and evaluating a range of possible responses and interpretations; 5. Developing personal views and insights; and 6. Applying the insights gained with increasing degrees of perception to one's own life. The Mother has pointed out that spiritual teaching is above religion: it strives towards a global truth. It is the teaching of the future life; it illumines the consciousness of individuals and prepares the individual for the realization of their future. In the sphere of spiritual development, religious hatred, dogmas, and rituals do not find a place: individuals learn to exist in peace, harmony, and tolerance.

Spiritual education does not exclude the study of the physical world. It is self-developing and self-finding.

Teaching Techniques & Principles of True Teaching

Teaching for Generating Love for Learning

There should be stress on generating love for learning. The teaching should be made interesting for the learner. According to The Mother, the individual should develop the habit of learning always, wherever one may be. The teacher's most precious gift is making the student develop love for learning. The students should be able to learn from all circumstances and from all happenings.

Stress on Learner Centred Approach

The Mother gave stress on learner centred approach. The teacher should not apply a rigid method that is applicable for every student. The first duty of the teacher should be to help the student to know oneself and to discover what one can do. In order to achieve this task, the teacher must be a keen observer of various natural and spontaneous activities undertaken by the learner. One must know the areas of interest, the level of intelligence and the nature of the human achievements that are sources of attraction. The modern teacher should not try to teach the same material to all students in the class. Exceptional children need to be given the freedom to study.

Methods of Teaching Small Children

The teacher must know every learner has an imagination, an instinct for words, a dramatic faculty, a wealth of idea and fancy. To start with, the teacher should make the child get interested in his/her own literature and the life surrounding him/her. The aim should be to perfect the mental functions and moral character. History, science, philosophy, art, etc. should be introduced informally and in an interesting manner. According to The Mother, the teacher should not get bored with the necessity of repeating a lesson, wherever necessary. Small children need to be given more opportunities for direct and purposeful experiences. They need to be educated through handling of concrete objects. Handling of things may lead to learning arrangement and tidiness techniques.

Methods of Teaching of Languages

The Mother gave much stress on reading habit and talking for mastering a language (The Mother 2002, p. 219). Therefore, to start with stress has to be given on oral work.

Development of Skills for Lifelong Learning

The Mother gave stress on lifelong education skills. According to her, schooling should provide the base for lifelong learning. The process of thinking, studying, progressing, and becoming intelligent should cover the whole of life. The Centres for Continuing Education existing in universities provide certain amount of education. The Sri Aurobindo Ashram organises many evening classes for ongoing education of *Ashramites and others staying at Puducherry*. One finds old persons studying new languages and listening to various types of lectures. The school building remains busy till dinner time.

The Teacher

According to The Mother, good teachers are always punctual. They come to the class a few minutes before it begins. An ideal teacher never gets irritated because of student problems. A good teacher must have infinite patience and a good insight. The teacher occupies the key role in the system of integral education

A Lifelong Learner

A good teacher is a lifelong learner. Gurudev Rabindranath Tagore compared the life of teacher with that of a lamp. As a lamp must be burning itself so that another lamp can be lighted from its flame, similarly the teacher must be a lifelong learner, so that learners can effectively learn from him/her. The Mother gave similar stress on lifelong learning pursuits of teachers. A good teacher should take life as a field of perpetual study, where one must never stop learning and think that one knows everything there is to know. One can always know more and understand better.

Personality Traits of a Successful Teacher

The Mother mentioned certain personality traits of a successful teacher. These were 1. Complete self-control; 2. Action for continuous self-learning; 3. Impartiality and humility; 4. Global comprehension or understanding; and 5. Acting as

a helper so that the learner can grow 'freely as an organic being, not to be kneaded and pressured into form like an inert plastic material (The Mother 2002, p. 167). Thus, the teacher occupies a key role in the system of integral education. The Mother's concept of an ideal teacher is very rigorous in nature. In order to become a good teacher, one must abolish in oneself all egoism. Good teachers, in order to provide psychic education, must be aware of their own psychic beings. They have also to be spiritual persons. They must continue to do physical exercise everyday as part of their own physical education programme. They should be good professional persons. They must read various journals in their profession. They must keep themselves abreast of modern developments in educational technology. Duties for mental education may be distributed among specific teachers, but other aspects of education must be distributed among all teachers. However, there may be an expert teacher for physical education. All teachers should not only know the principles of physical education but also practise these so that they can effectively take part in the general physical education programmes for the students.

Sri Aurobindo International Centre of Education, Puducherry

During second world war, many families came to Pondicherry. The Mother started a school to give education to these migrant children. This attempt developed into present Sri Aurobindo International Centre of Education at the Sri Aurobindo Ashram at Puducherry is a laboratory of Integral Education. The Centre does not have any branch. There are many schools going under the name Integral Schools situated in Orissa and elsewhere. These are schools managed by persons connected with Sri Aurobindo's ideals. These schools are not the branches of the Centre of Education at Puducherry. Some points concerning the Centre of Education are as follows: It was established as a school on 2nd December 1943. In 1951, Sri Aurobindo Memorial Convention was held at Puducherry. In 1952, the Ashram School was named as Sri Aurobindo University centre. In 1959, the word 'University' was dropped. The institution was named as Sri Aurobindo International Centre of Education. All teachers in the Centre are members of Sri Aurobindo Ashram, Puducherry Ashramites or non-Ashramite volunteers. The Centre does not award any degree or diploma. The Centre is not

affiliated to any Board or University. The Centre has been recognised by the Central Government as one of the five Institutions of higher learning of all India importance. The students completing higher course gets a Letter stating the subjects studied that has been recognised by the Union Public Service Commission as equivalent to Degree for various Central Government jobs and has been accepted by certain Central Universities for admission into PG Courses. The Mother did not like the situation prevailing in formal institutions. According to her, in most of the formal system, the children, at an age when they should be dreaming of beauty, greatness and perfection, dreams; they are found dreaming of money and worry about how to earn it. She pointed out that interest to earn money makes the students prepare themselves to pass examinations with success. The Mother suggested a daily prayer for a student which is "It is not for our family, it is not to secure a good position, it is not to earn money, it is not to obtain a diploma that we study. We study to learn, to know, to understand the world, and for the sake of the joy that it gives us." The National Policy on Education 1986 suggested steps to be taken for delinking of degrees from jobs. Rabindranath Tagore also was not in favour of awarding degrees and diplomas to students of Visva Bharati. Afterwards, when it became a Central University, it lost its originality. It started awarding Degrees and Diplomas. The Sri Aurobindo International Centre of Education, Puducherry, being not one University in the formal sense of the term, does not have the compulsion for its decision not to award degrees and diplomas. Students mostly stay in hostels. There is only one dining room for the students and teachers. Non-vegetarian food is served here for those who want. However, those who want can take food in the Ashram Dining Hall.

The institution starts every morning at 7.45 A.M. with a vocal or instrumental music played over loudspeaker for teachers and students to concentrate. There is no formal mass vocal prayer. There is no dress code either for teachers or for students. However, there is a physical education group wise dress code for physical education classes for both teachers and students. Class work continues till 11.30 A.M. with a break for 15 minutes from 9.30 A.M. to 9.45 A.M. and in the afternoon, the class work starts at 1.45 P.M. and continues up to 4.00 P. M. When necessary, teachers of dance, drama, music etc. also take classes

during evening hours. The academic session starts from December 16 every year, but the students are to be present on 13th December to receive their books and other materials. The classes are not held from 1st November to 15th December. The physical education programmes provided at the Centre of Education at Puducherry are not exclusively meant for students. The teachers and students and the members of the Ashram community jointly participate in physical education programmes. They have also regular health check-up. Wherever required, specific exercises are prescribed as per the medical advice. This is a unique institution of the country, which provides for physical education on all the days of the year. There are various groups, which have prescribed activities for different parts of the year. Physical education is provided on all days of the year. However, those who want to visit families staying outside Puducherry can do so during the period November 1-December 13 when there is no class work. Annual Physical education Demonstration takes place on 1st December and annual drama is enacted on 2nd December. The month of November that comes under rainy season is also utilised for training for annual physical education demonstration and practice for annual drama. The students at any stage are not to pay any tuition fee. They pay a sum of Rs. 500/- per year for their books and notebooks. The hostel charge is also Rs.500/- per month. The Centre has rich resource for physical education including a swimming pool. Physical education classes are held in afternoon hours. The Centre has also modern teaching aids including computer. A school teacher in the Centre need not possess any formal initial teacher training qualification such as B. Ed., Diploma for Teaching, etc. Medium of Instruction is French for Science students and English for Arts students. There is no formal class room work on Sundays, on 1st of each month, when the Ashramites receive their monthly quota of requirements and on Darshan days falling during the Session-21st February (Birth day of The Mother, founder of the Centre as well as of Sri Aurobindo Ashram, Puducherry), 29th February (Supramental day), 24th April (Final date of arrival of The Mother at Puducherry) and 15th August (Birth day of Sri Aurobindo). X-Mas Day is observed on 25th December. There is flexibility in subjects of instruction in various classes. The progress Report of the students is sent twice in a year. It does not mention marks awarded. It mentions the students' record in terms of 1. Ability; 2. Industry;

3. Interest; 4. Behaviour; 5. Attendance; and 6. Over all Progress. It also mentions periods allotted per subject per week and name of the teacher.

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

Free Progress System

The Centre adopts Free Progress System in higher classes. Four decades ago, APEID (1976) reported about importance of free progress system practised at this centre, in its document on educational innovations in Asia. The Mother coined the term Free Progress system. In this approach, the students are free to listen to the talks given by a teacher or to pursue study at library. They are free to go to a teacher at the appointed time for consultation. Such a system is applicable to the mature students, generally of 14 years of age. The students get advice only when they seek these. Schulte, Cendon, & Makoe (2020, p.4) stated that: Central to flexible learning is student centeredness that provides students with increased choice of what and when they want to learn and they will be able to choose their best options to customise and personalise their individual learning experience. This approach ensures that all students are included by offering multiple programmes for diverse students.

International Task Force on Teachers for Education 2030 (2021, pp.5-7) mentioned about new ways of learning and teaching. It referred to "the swelling field of artificial intelligence with self-learning machines that can potentially go further than human intelligence and become autonomous from human management (ITFTE 2021, pp. 5-6) and growing complexity of teaching "by conflicting demands related to the contexts of practice in which

teachers perform their work, which will very likely shape the futures of teaching” (ITFTE 2021, p. 7).

Methods of at the Sri Aurobindo International Centre of Education at Puducherry

Methods of teaching followed at the Centre are the ideal ones cherished in the writings of educationists. There are many methods, which are theoretically taught to teacher-education students at various universities, but most of these methods are not demonstrated in action in training institutions. Consequently, they remain only in the passive memory of the teacher. These methods one finds in practice at the Centre. For instance, a few teachers of India use the project method. But this is very often used at the Centre. A few years ago, during a visit to Puducherry, the author came across such an activity at the Sri Aurobindo international centre of Education. The students of 10 years of age (class IV according to other school standard) had organised a ‘Departmental store’ as part of their study of Mathematics. Parents and Ashramites were invited as customers. On arrival at the store, the customers had to draw money from the ‘bank’ (one received pieces of plain paper with amounts written on them). With this money one could make purchases at various counters, where articles of daily use-like soap, tooth paste etc. (represented by empty packets collected before by the students), clothe (represented by yarn), fruits depicted in drawings were offered. The students at the sales counter had with them a list of all articles and their rates. For the purchases, they had to issue receipts on which prices of various sold articles were mentioned. Further calculation was required while returning the balance money to the paying customer. This was application of mathematics in day-to-day life situations. The methods followed at the Centre can be ascertained by making a personal visit to the Centre. In the case of science lessons for children, one finds the use of field trips and projects. The teaching of languages is also exemplary. For, instance, learning of Sanskrit in many schools is very boring. One must get by heart grammatical rules and then go through Sanskrit texts. At the Centre, the teachers teach Sanskrit to preschool students through the direct method of teaching. One finds a boy or girl of 6 or 7 years of age comfortably talking with his or her friends in three or four languages- French, Sanskrit, English, and the mother tongue. The teachers of languages whenever

meet their students outside classroom situations also talk to them in the languages taught by them. Such learning of languages is also reinforced by the participation of students in dramas and such other activities. The Mother advised the teachers not to follow the bad methods found in certain universities outside. The teacher should not try to pump in mere data and information into students. There must be stress on development of understanding. The ideal teacher should not be in a hurry to finish the course. Thus, the method of teaching followed at the centre is truly child centered and aims at bringing out the best in the child. There cannot be standard methods of teaching. Each teacher must find out the method that suits oneself and the concerned students. Good teachers discover suitable methods.

Conclusion

Educational thoughts of The Mother are thoughts relevant for present century. These thoughts have taken into consideration all the schools of educational thoughts.

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Gender and Area as Determinants of Mathematics Anxiety among Elementary School Students

Shagun* and Vishal Sood**

Mathematics Anxiety is considered as determining factor of Mathematics and the research literature proclaims that it is determined by various factors present in the child's immediate environment. Gender stereotypes, myths about Mathematics, and spatial concerns have given an impetus to this aspect. The present study is an effort in this context that tries to uncover the role of gender and location of the school in determining Mathematics Anxiety among elementary school students. The study is empirical in nature based on primary data collected through a survey and emphasizes on Mathematics Anxiety as a trait of anxiety. The data have been analyzed statistically and findings have been drawn out with clear-cut implications for the teachers and parents to reduce Mathematics Anxiety among elementary school students.

The world is currently witnessing fast and rapid changes in the knowledge landscape with various dramatic, scientific, and technological advances viz. machine learning, artificial intelligence, etc. Such advances have also impacted the education sector and it has become importantly critical that the present-day children in schools do not learn but more importantly learn 'How to learn?' To cope-up with the continuously rising demands of the industry and the advances taking place therein, it is increasingly felt that there must be a larger emphasis on the development of critical thinking, logical reasoning, problem-solving ability, analytical thinking, etc. among the younger generation. In order to develop such competencies among children, Mathematics plays a significant role and the pedagogy of Mathematics should be such it makes Mathematics learning among students more joyful, experiential, inquiry-driven, discovery-oriented, and problem

solving-based. However, the current scenario of teaching-learning Mathematics at the school level is not so appreciating and encouraging on account of personal, institutional, and environmental factors. The learning outcomes in Mathematics at the school level are not up to the mark which is evident from different surveys conducted at state, national and international levels (ASER, 2012 and OECD, 2013). The low level of Mathematics learning outcomes may be attributed to lower competence in Mathematics and the use of inappropriate teaching-learning strategies by the teachers during classroom transactions. On account of such reasons, Mathematics is considered a dull and dreadful subject by students which creates anxiety among them towards studying Mathematics. Mathematics Anxiety is detrimental in nature to achieve higher outcomes in Mathematics as has been revealed in many of the previous research. A brief account of such previous research is presented here.

It was revealed by Dane (2005) that there were no gender-related differences in Mathematics Anxiety. On the other hand, the findings of Osborne (2001); Dowker et al. (2012); Yuksel (2008); Ameen, Baig, and Khaliq (2016), and Srivastava (2019) showed that females possessed higher Mathematics Anxiety as compared to the boys. Apart from the impact of gender on maths anxiety among students, Abbasi, Samadzadeh and Shahbazzadegan (2013) revealed a significant relationship between students' Mathematics Anxiety and teachers' personality characteristics. Researchers in the past have identified other factors influencing maths anxiety among students. Srivastava (2019) showed that personal and institutional factors like gender, attitude, parental education, Mathematics achievement, and school type need no longer be neglected in research efforts directed toward studying Mathematics Anxiety. In the context of studies on characteristics of mathematics-anxious students, Ashcraft (2002) pointed out that highly mathematics-anxious individuals are characterized by a strong tendency to avoid Mathematics which ultimately undercuts their Maths competence and forecloses their important career paths. Math anxiety disrupts cognitive processing by

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compromising ongoing activity in working memory. Betz, 1978; Ma and Xu, 2004; Rodarte-Luna and Sherry, 2008; Jain and Dowson, 2009; Elizabeth et al., 2018 suggested that Mathematics Anxiety is a highly prevalent problem among students from elementary schools to universities. Morsanyi, et. al. (2014) and Primi, et. al. (2018) remarked that Mathematics Anxiety is also related to reduced cognitive reflection and poorer decision-making performance. Musa and Maat (2021) revealed that Mathematics Anxiety was experienced by both high and low-achieving students. Khasawneh, Gosling, and Williams (2021) observed that maths anxiety is an issue that affects many disciplines across multiple countries and sectors. Mann and Walshaw (2019) pointed out that anxiety in assessment is the biggest factor contributing to Mathematics Anxiety. This is because mathematics-anxious students become very nervous under evaluation and they tend to have a negative perception or expectation toward assessment. In order to prevent the long-lasting effects of mathematics anxiety, Mier, Schleepen and Bern (2019) emphasized the importance of early remediation of maths anxiety in girls. Rozgonjuk, Kraav, Mikkor and That (2020) revealed that Mathematics self-efficacy plays a great role in Mathematics Anxiety and suggested that improving students' self-efficacy will be helpful in reducing Mathematics Anxiety. In light of the above discussion on research-based findings, the present research work was conceptualized with the following objectives:

- To study the level of Mathematics Anxiety (as trait anxiety) among elementary school students.
- To study the gender-wise difference in Mathematics Anxiety among elementary school students.
- To study the difference in Mathematics Anxiety of elementary school students with respect to the location of the school.
- Hypotheses for the study include:
 - There will be no significant gender-wise difference in Mathematics Anxiety of elementary school students.
 - The students studying in elementary schools located in rural areas will not differ significantly in terms of Mathematics Anxiety as compared to their urban counterparts.

Methodology

To achieve the objectives of the study, the “Survey Technique” under the Descriptive Method of Research was used. The sample for the present study was comprised of 230 elementary school students (class 7th) from two districts i.e. Kangra and Hamirpur of Himachal Pradesh. The students were selected by using a stratified random sampling technique. The sample comprised 91 boys and 139 girls from both urban (05) and rural (07) elementary schools.

Mathematics Anxiety Scale (MAS) by Sood and Shagun (2022) was used for collecting data in the present study. The data were analyzed by using descriptive statistics and t-test was used to study differences in Mathematics Anxiety among elementary school students with respect to gender and location of the school.

Findings of the Study

On the basis of the analysis of data, it was revealed that the value of skewness for Mathematics Anxiety scores of all selected elementary school students came out to be 0.52 which shows *positive skewness* in the distribution of Mathematics Anxiety scores. This means that most of the students lie on the negative side of the normal probability curve thus, showing a low level of Mathematics Anxiety among them. In addition to this, the value of kurtosis was calculated to be 0.184 thereby indicating that the curve is *platykurtic* in nature. The overall mean of the Mathematics Anxiety scores of all elementary school students came out to be 76.14 with a standard deviation of 22.16 which shows that the students possessed average Mathematics Anxiety levels. The mean, standard deviation, and t-value of Mathematics Anxiety scores of students with respect to gender and location of school are given in Table 1.

Means, Standard deviations, and t-values in respect of Mathematics Anxiety Scores of Students with regard to Gender and Location of School

The mean values of Mathematics Anxiety scores for boys and girls came out to be 69.48 (S.D. = 20.93) and 80.50 (S.D. = 21.93), respectively. The mean values depict that the boys possess below-average Mathematics Anxiety; whereas girls possessed an average level of Mathematics Anxiety. The mean difference in

Mathematics Anxiety between boys and girls is 11.2. The t-value in respect of this mean difference came out to be 3.78** which was significant at 0.01 level of significance, for $d_f = 228$. Therefore, it was interpreted that girls have significantly higher Mathematics Anxiety as compared to elementary school boys. Thus, the null hypothesis, “*There will be no significant gender-wise difference in Mathematics Anxiety of elementary school students,*” is not accepted.

The mean values of Mathematics Anxiety scores of students studying in rural and urban elementary schools came out to be 74.52 (S.D. = 18.48) and 76.72 (S.D. = 23.35) respectively. The mean values depict that students from both rural as well as urban elementary schools possessed average levels of Mathematics Anxiety. The mean difference in Mathematics Anxiety between students studying in urban and rural elementary schools was found to be 2.20. The t-value testing the significance of this mean difference came out to be 0.66 which was not significant at 0.05 level of significance, for $d_f = 228$. Thus, the null hypothesis, “*The students studying in elementary schools located in rural areas will not differ significantly in terms of Mathematics Anxiety as compared to urban counterparts,*” stands accepted. Hence, it was interpreted that the rural and urban elementary school students possessed a similar level of Mathematics Anxiety.

Discussion of the Findings

The present investigation was undertaken to study the level of Mathematics Anxiety among elementary school students with respect to gender and location of elementary schools (rural/urban). The findings of the study revealed that elementary school students possessed moderate Mathematics Anxiety levels. Although it may seem to be appropriate and satisfactory in one sense, however, it cannot be considered a better indicator of a healthy educational

system in general and an outcome-based teaching-learning process. Hence, the reasons for such anxiety levels that adversely influence the Mathematics achievement of the students are required to be identified and proper curative measures should be undertaken by the teachers to reduce Mathematics Anxiety among the students.

The findings of the study have also revealed that elementary school girls possessed higher Mathematics Anxiety as compared to boys. There may be many factors contributing to higher Mathematics Anxiety among girls. In this regard, Hadfield and McNeil, 1994 (as cited by Trujiilo and Hadfield, 1999) have pointed out that Mathematics Anxiety can result from environmental factors such as; pressure from parents, insensitivity among teachers regarding Mathematics, lack of participation of students in Mathematics teaching-learning process and negative experiences gained therefrom. Srivastva (2019) pointed out that personal and institutional factors such as gender, attitude, parental education, and school type should not be neglected while making research efforts towards studying Mathematics Anxiety. Therefore, in the present study, it might be possible that higher Mathematics Anxiety among elementary school girls exists due to such environmental factors. It is therefore suggested that such factors leading towards higher Mathematics Anxiety be identified and appropriate measures should be taken up by the teachers and parents to reduce Mathematics Anxiety among the children. The teachers should use such teaching methods and strategies that focus more on conceptual understanding in Mathematics rather than on memorizing the facts. Making Mathematics an interesting and lively venture for young growing minds is really a big challenge for teachers, but it must be made so. The teachers are required to upgrade their skills in

Table 1: T-Value of Mathematics Anxiety Scores of Students with Respect to Gender and Location of School

Variable	Group	N	Mean	S.D	t-value
Gender	Boys	91	69.48	20.93	3.78**
	Girls	139	80.50	21.93	
Location of School	Rural	60	74.52	18.48	0.66 (NS)
	Urban	170	76.72	23.53	

** - Significant at 0.01 Level of Significance NS - Not Significant

mental Mathematics and use quicker computation techniques as envisaged in the Vedic Mathematics approach propounded by Swami Bharti Krishna Teerathji (Shagun, 2022). In order to improve Mathematics competency and reduce Mathematics Anxiety, it is necessary that more emphasis should be laid down by the teachers on the practice part of mathematical concepts. In this context, Goetz, et. al. (2013) have pointed out that subjective beliefs involving personal competence (also referred to as competence beliefs) represent a critical antecedent of anxiety and play a central role in the self-reports of trait emotions more generally (Pekrun, 2006). The findings by Keller (2002) and Steele and Aronson (1995) suggested that gender stereotypes about Mathematics may be largely responsible for girls' lower level of perceived competence in this domain as evidenced by statements like, 'Girls and Mathematics are a bad fit' or 'Mathematics is clearly a male domain'. These previous findings to a larger extent support the present findings where girls have shown higher Mathematics Anxiety as compared to boys. However, on the screening of the Mathematics Anxiety Scale (Sood and Shagun, 2022), it came to the forefront that the items of the scale were developed on the basis of a trait approach and as a self-report measure. This indicates that the girls possessed more trait anxiety in Mathematics than boys which may be due to a lower level of perceived Mathematics competence among the girls. Such a situation requires urgent attention from the curriculum developers, mathematics textbook writers, and Mathematics teachers who may contribute collaboratively in terms of reducing Mathematics Anxiety and enhancing self-beliefs about Mathematics among girls. Appropriate academic support to learn Mathematics and choose Mathematics as a subject at a higher level need to be provided by the family members otherwise girls may opt out of such occupational domains involving mathematical thinking because of unjustified biases and perceived anxiety levels. In this context, Goetz, et. al. (2013) have suggested directly addressing girls' self-defeating cognitions and emotions in Mathematics. The teachers should help the girls in improving their engagement and achievement in Mathematics through different cognitive interventions and continuous motivation through which the Mathematics Anxiety level of the girls can be reduced to a greater extent.

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Need for Holistic Education with Multiple Dimensions of Human Personality

D P Agrawal, Former Chairman, Union Public Service Commission, New Delhi delivered the Convocation Address at the 5th Convocation Ceremony of Krishna Kanta Handiqui State Open University, Guwahati, Assam on February 02, 2023. He said, “The most important part of education is to imbibe the confidence among the students in the spirit of “we can do it.” We are blessed with human minds which is a unique gift. Curiosity and thinking are means of progress and breeding new knowledge. When knowledge blends with a value system, a person gets empowered. I would like you to have a mind to explore every aspect of human life. I urge you to remain committed to the values espoused by your institution. Whatever walks of life you may pursue, you will find that a commitment to excellence, justice and fair play, hard work, and team spirit will stand you in good stead. It’s time to put your learning in the real world.” Excerpts.

I and my wife are extremely happy and privileged to be present today on the occasion of the Fifth Convocation of the Krishna Kant Handiqui State Open University. We pay our gratitude to the university authorities for inviting us on this joyous occasion.

I am especially happy celebrating this occasion with the younger generation – the students who are the future of our country. I congratulate all the graduating students receiving their degrees today. For all of them, it is the apt reward of years of hard work and recognition of their academic merit from this premier university in North east India. You can build over the university learning through the field experiences to become a most productive graduate. I am confident that the knowledge, skills and attitude imbibed by each one of you during your stay at this university will stand you in good stead for the rest of your life.

I congratulate all the teachers and staff of this university and all those who have made excellent contribution in shaping young minds to be ready to contribute to the nation building in multiple fields.

I also congratulate the parents of the students, who are present at this Convocation. Without their sacrifices and a good deal of support, successful completion of higher studies by young men and women, who are here today, would not have been possible. As a parent myself, I know that the convocation memories are imprint forever.

You are leaving portals of this institute at a time when enormous changes are occurring globally and

India is galloping towards its leadership place in the world. We are the mother democracy. Knowledge and attainments in the digital world are becoming the vehicle of superiority. Outside the boundaries of this campus lies the unknown. Your responsibilities suddenly multiply.

Traditionally, the speech at the convocation is the last piece of advice to you before you graduate. I recognize that this is an awesome responsibility and I propose to discharge it by offering some thoughts on India’s developmental and education canvass, kind of world you will face as you enter your working life and the kind of India you shall make.

I am extremely happy to learn about the excellent achievements of this university in the short period of its being. The university offers Diploma, Batchelor, Graduate, Post graduate and research certification. The University also addresses the need of vocational education and entrepreneurship. The University holds a great promise of providing quality education, equality of opportunities in higher education and bringing into its fold the deprived and denied sections of the society.

Assam has nurtured culture, skills and humanity amongst its citizens over centuries. It had produced great thinkers, reformers, social leaders, educationists, political leaders. It is maintaining it continuously which is a matter of pride. This paradigm enables the universities in Assam to free thinking and creativity. I wish that the universities must produce innovative models for national development. A development process, which touches the poorest of the poor. They must also recognize the growing aspirations of people

to lead a quality life. We must understand and apprise our people of the right meaning of quality of life. Should it be the carbon copy of the West bordering on the higher rate of consumption or it draws from the ethos of this great nation?

Following the mantra of reform, perform and transform, our economy is now growing at a rapid rate. We are marching ahead on the path of economic growth and development. India today has achieved the milestone of being the 5th largest economy in the world. This is a new India that does not shy away from feeling proud of its history, its values, culture, community bonding and society. Through newer and people-friendly policies such as Digital India, Swachh Bharat Abhiyan, Smart Cities, Start-up India and an overarching scheme of *Atma Nirbhar Bharat*; which stand on the five pillars of Economy—Infrastructure, 21st century technology-driven arrangements and system, Demand and Vibrant Demography to name a few, we are moving towards “Sub ka Saath and Sab ka Vikas.”

This growth trajectory enabled the nation to focus on improving the developmental Indices, basic infrastructure especially in social and agriculture sectors by harnessing scientific developments. The setback due to the pandemic is over. The Honorable President of India on the eve of this Republic Day said “In its initial phase, Covid-19 also hurt India’s economy badly. Yet, guided by our able leadership and driven by our resilience, we soon came out of the downturn and resumed the growth saga. Most sectors of the economy have shaken off the pandemic effect. India has been among the fastest-growing major economies.” It is the time that we dedicate ourselves to nation-building, and preserve our cultural heritage and value while the quality of life of each citizen has improved.

The world needs peace, progress, social cohesion and spirit to live together. There is a need to expose our young generation to ideas of universal love, tolerance and peace. There is a need to offer holistic education with multiple dimensions of human personality. The education system must create capacities among the students of inquiry, creativity, technology, and entrepreneurial and moral leadership. If we develop in all our students these five capacities, we will produce the “Autonomous Learner” who is a self-directed, self-controlled, lifelong learner who will have the capacity to both respect authority, and at

the same time, is capable of questioning the authority, in an appropriate manner. The most important part of education is to imbibe the confidence among the students in the spirit of “we can do it.” Our developments follow SDG with immense regard to the environment.

The NEP 2020 sets the future agenda for education to empower individuals, assure high quality of life and pave the way for a learning society. The new system of education has to be rooted in culture and committed to progress and make me feel proud to be Indian. The Hon’ble PM has spoken widely on NEP-2020 at different forums and guided its understanding and implementation. PM Modi Ji said, “The needs of 21st Century India can’t be fulfilled through the ways of the 20th Century.” He listed the 21st-century skills such as Critical Thinking, Creativity, Collaboration, Curiosity and Communication. He said that students should learn coding from the beginning, understand Artificial Intelligence, and join the Internet of Things, Cloud Computing, Data Science and Robotics. On Shikshak Parv in 2020, he gave a formula for the new age learning encompassing Engage, Explore, Experience, Express and Excel. One of the main goals of the NEP 2020 is inclusiveness and reaching the unreached and attaining higher GER. This led to the NEP 2020 to devote a full chapter on Open and distance learning and has recommended the creation of NETF for integration of technology in ODL to increase its reach and quality.

Open distance learning is an alternative model of education for citizens who missed formal education, especially in the rural and far-flung areas including women. It is convenient, cost-effective, student centered and less bureaucratic. Distance education is a blessing for young women from rural areas and disadvantaged groups who otherwise were unable to get and continue their education due to their productive, reproductive and socio-cultural gender role in society. Education can open up better economic opportunities for all, improve the quality of their lives, and empower them to make the world a better place for others in their sphere of influence. Online education is particularly useful for inspiring young students to achieve these benefits. eLearning can help students transcend the limitations of their geographic locations, conquer their financial difficulties, overcome time constraints, solve their problems and better their lives in every imaginable way.

Effective education through ODL can guarantee the smooth functioning of society. It creates the capacity for inclusion in society, develops individual capabilities and skills and brings social solidarity in society. With the recognized benefits of ODL, the SDGs can be realized while engaging the youth.

Distance education has also become a need of corporations for corporate training and education due to its various benefits. The use of modern communication technology has made this training more effective, beneficial and widely covered with more engagement of the young employees. IT-enabled student support services are compensating the face-to-face support and interaction with the teachers.

However, Open and distance learning in the university system face challenges of quality, acceptability, learning through fieldwork and hands-on laboratories, assessment models and quality assurance. The NEP 2020 focuses on flexible, outcome-based education system with credit transfer, and a multi-disciplinary curriculum engaging students in acquiring knowledge and skills from where ever is possible. For the holistic personality development of the students, activities in teams, groups, with society, and learning from experiences, learning from play fields and cultural domain are certification needs. The NEP 2020 also highlights Indianness and its ethos in our future learning paradigm. Attaining them in the ODL paradigm is a daunting task. It, the education policy also highlights the seamless integration of technology to the process of education to achieve the stated goals.

The Digital India Campaign is helping to transform the entire nation into a digitally empowered society and knowledge economy. While education will play a critical role in this transformation, technology itself will play an important role in the improvement of educational processes and outcomes; thus, the relationship between technology and education at all levels is bi-directional. ICT should be an integral element in the educational process. This seamless integration must happen at all levels viz; when new institutes are conceived and built when curricula are reviewed, when class schedules are established, when in-service programmes are planned, when assessment methods are revised, and when pedagogical practices of every teacher being evaluated. Some of the immediate tasks on hand in ODL are:

Creating quality education and Accreditation in the ODL system through

- Standardized national tests
- Certification of educational institutions/ Accreditation
- Student satisfaction measures
- Industry feedback
- National indices such as patents
- Govt. set standards
- Student evaluation
- Course evaluation

Distance education in the future is geared toward learning beyond:

- Beyond Students: Practicing Managers
- Beyond Globalization: Balanced International Experience
- Beyond Teaching: Learning (Formalized Knowledge, Experience Sharing, Real World Experience)
- Beyond Functions:
 - ✓ Managing Self: The Reflective Mindset
 - ✓ Managing Relationships: Collaborative Mindset
 - ✓ Managing Organization: Analytical Mindset
 - ✓ Managing Context: Worldly Mindset
 - ✓ Managing Change: Action Mindset
 - ✓ Beyond Classroom: Extending Educational Experience to workplace

Effectiveness in IT applications requires attention to:

- Development of more demanding curriculum material
- Ongoing programme for intensive teacher training
- Assessment programme for school administrator
- Restructuring of learning environment

Creation of learning resources:

Knowledge modules based on the personalized needs of the learner would need to be delivered to him/her at the right time with the right content interactively to take care of his/her aspirations. In

due course of time, there would be a need to develop and maintain the knowledge and capability profile of every individual learner/worker. Such a system would have to be developed in a cost-effective manner over a period of time, integrating, inter-alia the following objectives:

- Effective utilization of intellectual resources, minimizing wastage of time in scouting for opportunities or desired items of knowledge appropriate to the requirement.
- Certification of attainments of any kind at any level acquired through formal or non-formal means in conventional or non-conventional fields.
- Any-time availability of desired knowledge at appropriate levels of comprehension to all for self-paced learning.
- Platform for sharing ideas and techniques and pooling of knowledge resources.

I urge KKHSOU to address all the issues stated to make it relevant in the future as a great center for learning.

We are blessed with human minds which is a unique gift. Curiosity and thinking are means of progress and breeding new knowledge. When knowledge blends with a value system, a person gets empowered. I would like you to have a mind to explore every aspect of human life. You become a great thinker and action will follow.

In conclusion, I urge you to remain committed to the values espoused by your institution. Whatever walks of life you may pursue, you will find that a commitment to excellence, justice and fair play, hard work, and team spirit will stand you in good stead. It's time to put your learning into the real world.

I wish you the very best in all your future missions and goals.

I pray to the Almighty to shower on you all the happiness of the world.

Jai Hind

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The Association of Indian Universities

The Association of Indian Universities (AIU), is one of the premier apex higher education institutions of the Country established in 1925. It is a research-based policy advice institution to the Government of India in the field of Higher Education, Sports, and Culture. Since its inception, it has been playing a vital role in shaping Indian higher education. Most importantly, AIU is vested with the power of according equivalence to Degrees/Qualifications offered by the universities across the world with those offered in India. AIU has also been mandated by the Department of School Education, Ministry of Education, Government of India to accord equivalence to the Indian Boards for the Secondary/Senior Secondary Examination vide Gazette Notification. AIU is a think tank body with the responsibility of undertaking academic activities such as: conducting Research Studies in higher education; acting as the bureau of information on higher education; liaising with international bodies and universities for the internationalisation of Indian higher education among many others. AIU conducts inter-university sports and cultural events at national and international levels. As a National Sports Promotion Organization (NSPO) it promotes sports among Member-Universities and maintains the standards in sports.

Being an apex advisory institution, it constitutes an integral part of all major decision-making committees and commissions in the country. As a representative body of Indian universities, it facilitates cooperation and coordination among Indian universities and liaises between the universities and the Government (Central as well as the State Governments) and also National and International bodies of higher education in other countries in matters of common interest. Whereas all the Indian universities benefit from its contribution, at present it has a membership of about 898 universities including 14 overseas universities from other countries viz. Bhutan, UAE, Kazakhstan, Mauritius, Malaysia Nepal, as Associate Members.

Some of the legends among many, who served AIU as its Presidents are Dr. Sarvepalli Radhakrishnan, Dr Zakir Hussain, Dr. Syama Prasad Mukherjee, Dr K L Shrimali A.L Mudaliar, Dr Akbar Hydary, Prof A C Woolner, Pandit Amarnath Jha, Sir Maurice Gwyer, Dr K L Shrimali, Prof Shiv Mangal Singh 'Suman', Prof M S Gore, Prof M S Adishesiah, Prof M S Valiathan.

CAMPUS NEWS

International Conference on Knowledge Organization in Academic Libraries (I-KOAL 2023)

A two-day International Conference on 'Knowledge Organization in Academic Libraries (I-KOAL 2023)' was jointly organized by the Library Professional Association, New Delhi and C-DAC Library, Kharghar in the Financial Capital of India, Mumbai during January 20-21, 2023. The main theme of the event was 'Redesigning Modern Library and Innovative Services in the Digital Environment'. More than 100 delegates participated in the event. The event offered opportunities to the participating audiences to interact with activists, academicians, scholars and experts from all over the country who deliberated upon and covered topics around the issues of ONOS, predatory journals and customized information services, etc.

The inaugural session was hosted by Dr. Manisha Gupta, Librarian, GCA Chandigarh. It started with the welcome address by Dr. M Sasikumar, Executive Director, C-DAC Mumbai followed by the lighting of a lamp and *Sarswati Vandana*. Dr. R N Malviya, President, LPA apprised the audience about the background, events, services, and activities conducted by LPA. Dr. Anand A Jha, Director, I-KOAL and treasurer briefed about the conference. The conference proceeding was released by the dignitaries on the dice. Dr. C P Johnson, (C-DAC, Mumbai) mentioned in his special address the need of redesigning libraries. Executive Director, C-DAC, Dr. M Sasikumar in his presidential address talked about the importance of libraries as reservoirs of knowledge and the concept of resource sharing.

Prof. Milind Pande, Pro-Vice Chancellor, MIT-WUP, Pune graced the occasion as the Chief Guest. He talked about ABCD (Artificial Intelligence, Blockchain, Cloud Computing, Data Science) technologies that can be applied to libraries. He mentioned the importance of the 3'S (speed, skill, and scale) in the context of the profession. He emphasized the practical hands-on sessions during the event. Prof. Pande also announced to host of the next I-KOAL 2024 on the campus of MIT-WUP Pune

under the Organising Secretaryship of Dr. Nitin S Joshi, University Librarian, MIT-WUP. Momentos were presented to the dignitaries by the LPA team.

To promote the library and information science profession and motivate budding professionals, a small award ceremony was also conducted during the inaugural session in different categories and the names of awardees were announced by Dr. Salek Chand, Conference Convener and General Secretary, LPA. The Awardees were as follows:

- Dr. R K Verma, Ex-Senior Scientist, NISCAIR conferred upon the LPA Lifetime Achievement Award
- Dr. P Mohanathan, Anna Central Library, Chennai conferred upon LPA Excellence Award for Public Library Professional
- Dr. Kaushal Kishore Chaudhary, BAB Bihar University, Muzaffarpur conferred upon LPA Excellence Award for University Library Professional
- Prof. Ramesha, Bangalore University, Bangalore conferred upon LPA Excellence Award for LIS Teacher
- Dr. D D Lal, NBRC, Gurugram conferred upon LPA Excellence Award for Research Library professional
- Dr. Shantashree S Sengupta, Librarian, PESMCA and SC, Pune conferred upon LPA Excellence Award for College Library Professional

The Technical Session was Chaired by Dr. Keshava, DLIS Chairman, Tumukur University and Co-chaired by Ms Neeru Sharma, C-DAC Noida. Dr. R K Verma, Ex Senior Scientist, NISCAIR discussed about new customized information services to the LIS professionals through DISHA' (Desired Information Seeking from Helpful Advisors). During the session, three papers were presented.

The next session apprised the participants of the concept of predatory journals through the presentation by Ms Vandana Chandere under the Chairmanship of Prof. M Natarajan and Dr. Minaxi

A.P. Dr. Susma Powdwal invited speaker talked about her topic 'Emerging Trends in Academic Libraries'. She also mentioned the new term 'COPETITION' (cooperation and competition) which is emerging these days and 3C is an example of competition.

The other session after the lunch witnessed the product presentations by Balani Infotech Pvt. Ltd. and Testle Labs Pvt. Ltd. under the Chairmanship of Ms. Lalita Dheer, Librarian, PGIMER, Chandigarh and Ms. Vandana Chandere, TO, NIV, Pune. The features of DrillBit, Plagiarism Detection Software were explained in detail by Bilani Infotech representative. The live demonstration of KIBO SCANNER was presented by Testle Labs, Bangalore.

There were five presentations in the next session presented by the delegates. Prof. H. Chakraborty, Head, DLIS, Sampurnanand University, Varansi along with Ms. Rajni Raina chaired the session. The one Nation One Subscription (ONOS) initiative was discussed in detail by Dr. D D Lal. Dr. Dharamvir talked about 'Changing Dimensions of Professionals' Activities in Libraries'.

The last session after the tea break was graced by Dr. Anil K. Dhiman and Dr. Manisha Gupta. About seven papers were presented in the session. Mr. Abdulbaqi Mohammed Gabdo, Nigeria gave an insight on the assessment of public libraries 4.0 in the light of A.I. and Gig librarianship. The highly learned and technology-focused day ended with a poetic and song presentation by a few participants to provide relaxation and boost the morale of participants for the concluding day of the conference.

Dr. Salek Chand again welcomed the participants for the Plenary Session on 'National Education Policy (NEP)-2020 and Libraries: Present and Future'. The session was moderated by Prof. Paramjeet Kaur Walia, DLIS, University of Delhi. The panelists were Prof. Ramesha, Dr. D D Lal, Dr. K K. Chaudhary, Dr. Shantashree S Sengupta, Mr. Amogh S Lokhande and Sh. Dharamvir, President, AMLA. After a brief introduction about NEP- 2020, the moderator emphasized the need to revamp the school libraries as they are the budding ground for future education. Dr. Ramesha talked about how the LIS curriculum is going to respond to NEP. He mentioned the state of Karnataka as the first state which has implemented NEP—2020 at all

levels, i.e. school, college, and university levels. According to him, NEP-2020 is the most progressive policy of the 21st century which is more holistic and multidisciplinary in nature. Under this, students can take LIS as a major and minor course.

Dr. D D Lal mentioned the promotion of electronic resources among students and the promotion of the mother tongue. He highlighted DELCON consortia, *Swayam Prabha* and MOOCS in his talk. Dr. K K Chaudhary discussed the flexible approach for the students. He accentuated that the posts of professionals and librarians in libraries have to be filled with immediate effect. Dr. Sengupta talked about the MHRD website and how we people are ignoring the major stakeholders i.e. the students. She emphasized that students should be made aware of NEP-2020 and the difference between the new and old curriculum. According to her viewpoint, the involvement of everyone is the key to sure-short success for the adoption of this policy.

Mr. Amogh S. Lokhande shared that there is no special mention of how special libraries and NEP are related. He propounded about resource sharing and sticking to the five laws of library science. Sh. Dharamvir put light on the fact that policies are made in our country but not implemented in the true sense. He talked about the lack of staff in libraries and how pay disparity exists between private and government libraries. The moderator, Prof. Walia concluded the session with her remarks that all the speakers had touched on relevant areas. She said that the collaboration of major stakeholders will be fruitful for this policy. And above all, the inclusion of a chapter on libraries in the NEP-2020 is the need of the hour supported by the entire panelist.

The last session was chaired by Prof. Dharmendra Mehta, FMS, Ujjain University and Dr. Mamta Amarpuri, Librarian, Darshan Academy, Delhi. A total of five papers were presented during the session. There were two invited speakers for the session also. Dr. Nitin S Joshi, University Librarian, MIT-WUP, Pune briefed about smart stock verification with electronic tools. Dr. Pralhad Jadhav, Associate Director (Lib.) Khaitan and Co. discussed copyright in the library through their presentation.

The Valedictory Session was graced by Mr. Prakash Pimpale, Joint Director, C-DAC, Mumbai along with other dignitaries. The following awards were presented:

- LPA Excellence Award for Medical Librarian was awarded to Ms. Vandana Chandere, Scientist, NIV, Pune
- LPA Excellence Award for University Library Professional was awarded to Ms. Harpreet Kaur, USOL, Panjab University, Chandigarh
- LPA Special Guest Award was awarded to Prof. Paramjeet Kaur Walia, DLIS, University of Delhi, Delhi
- Outstanding Leader in LIS by AMLA was awarded to Dr. Salek Chand, SDO, NDC, NIHFV, New Delhi
- Best Paper Award was given to Dr. Neha M. Joshi, Librarian, G.S. College of Art and Commerce, Mumbai
- Best Paper Presentation Award was given to Dr. Minaxi A.P, Central University, Gujarat

After the award ceremony, a few delegates shared their experiences about the two-day event. In the end, Mr. Ram Singh Bairwa, Organizing Secretary, I-KOAL 2023 proposed a Vote of Thanks.

Finally, the presence of dignitaries, an impressive lineup of scholars from across the country, the support of sponsors and media partners, an array of carefully selected, well-researched and well-presented papers on the subject, all came together to help Team LPA to admirably conclude this huge endeavor. This conference has, without a shade of doubt, made the academic fraternity richer, with the additional literature in form of scholarly works on the subject. The views expressed and explored on this platform by the resource persons and paper presenters made the audience rethink ideas that we cling to unthinkingly in our day-to-day working of libraries. The conference owes its success to the able guidance of President, Dr. R N Malviya and the hard work put in by the entire LPA team led by Dr. Salek Chand, Dr. Anand A. Jha, and Dr. M Sasikumar, Executive Director C-DAC Mumbai and his team including Mr. Ram Singh from C-DAC, Kharghar, Mumbai. Ms Harpreet Kaur acted as Rapporteur General, I-KOAL 2023.

International Conference on Social Science, Arts, Business, and Education

The One-day International Conference on ‘Social Science, Arts, Business and Education’ is

being organized by the Institute for Scientific and Engineering Research on April 09, 2023 at Bangalore. This event will bring leading scientists, academicians, industry professionals, speakers, and experts to one platform. The ISER aims to present techniques, skills, and the latest information in various fields like science, technology, medical sciences, environment, education, business, banking, finance, languages, history, and much more. It helps participants to explore speaking opportunities, present their unique ideas and create significant connections. The Topics of the event are:

- Accounting.
- Economics.
- Education.
- Entrepreneurship.
- Finance.
- Innovation and Technology Management
- International Business
- Management
- Marketing
- Social Business
- Social Sciences

For further details, contact Program Manager, Institute for Scientific and Engineering Research, Mobile No: +91 9344535394, E-mail: event@iser.org.in. For updates, log on to: www.iser.org.in/conf/

Faculty Development Programme in Pedagogy and Research Methods

The Faculty Development Programme (FDP) in ‘Pedagogy and Research Methods’ for Management Teachers is being organized by the Indian Institute of Management Ahmedabad (IIMA) from April 11 - May 25, 2023. It aims at the professional development of faculty members of institutions of management education. It is a residential programme that provides rigorous training in general management principles, pedagogical techniques (including case method), cutting-edge research methods, and advanced topics in specialized areas.

The FDP is designed for management teachers and researchers working in management schools, universities, colleges, and professional institutes. Individuals teaching in staff training colleges, training centers of industrial organizations, and staff training institutes of central and state governments that teach

management and allied subjects may also participate. It is especially suited for management educators seeking to strengthen their understanding of research, learn and experiment with effective pedagogical techniques and gain familiarity with essential aspects of carrying out research studies.

Course Work

The Faculty Development Programme in Pedagogy and Research Methods will provide training in pedagogical techniques including the case method of teaching, case writing, and training in classroom effectiveness. The module also covers important aspects of carrying out management research including qualitative and quantitative research methods, statistical data analysis, multivariate analysis techniques, and aspects of formulation of research problems and the journal publication process. The Areas of the Programme are:

- Centre for Management in Agriculture.
- Communication.

- Economics.
- Finance and Accounting.
- Human Resources Management.
- Information Systems.
- Marketing.
- Organizational Behaviour.
- Production and Quantitative Methods.
- Public Systems Group.
- Ravi J. Matthai Centre for Educational Innovation.
- Strategy.

For further details, contact Faculty Development Programme Office, Indian Institute of Management Ahmedabad, Vastrapur, Ahmedabad - 380 015 (Gujarat). Phone No: +91-79 – 7152 4961, Mobile No: +91 9909038704, E-mail: fdpoffice@iima.ac.in. For updates, log on to: <https://iima.ac.in/academics/FDP>

AIU News

ANVESHAN: Student Research Convention Central Zone

A two-day Central Zone Student Research Convention, *ANVESHAN – 2022* was organized successfully by Ravenshaw University, Cuttack during January 24-25, 2023 under the aegis of the Association of Indian Universities (AIU), New Delhi. A total of 89 participants registered from 18 universities and about 54 projects were accepted for the Convention.

The universities from the Central Zone who participated in the event were Ravenshaw University, Cuttack, Odisha, Sambalpur University, Sambalpur, Odisha, Fakir Mohan University, Balasore, Odisha, Khallikote Unitary University, Berhampur, Ganjam, Odisha, Maharaja Sriram Chandra Bhanja Deo University, Baripada, Odisha, Berhampur University, Brahmapur, Odisha, Rama Devi Women's University, Bhubaneswar, Odisha, Gangadhar Meher University, Sambalpur, Odisha, Rajendra University, Balangir, Odisha, Gandhi Institute of Engineering and Technology, Rayagada, Odisha, ISBM University, Noida, Uttar Pradesh, Sri Sri University, Cuttack, Odisha, Centurion University of Technology and

Management, Parlakhemundi, Odisha, Kalinga Institute of Social Sciences, Bhubaneswar, Odisha, Pt. Ravishankar Shukla University, Raipur, Dr. C V Raman University, Bilaspur, and Kalinga University, Raipur.

The Central Zone Students Research Convention was formally inaugurated by the lighting of the lamp by the distinguished guests followed by a floral welcome to the dignitaries on the Dias.

The Welcome Address was delivered by Prof Sudarshan Mishra, Coordinator of the Convention. He presented the objectives of the *ANVESHAN* and Central Zone Convention. He also discussed the role of the Association of Indian Universities, New Delhi in promoting research culture among the students of Higher Education Institutions (HEIs). Dr. Sarat Kumar Rout, University Coordinator of the Convention introduced the distinguished Guests. In his Inaugural Address, Prof Sanjay Kumar Nayak, Vice Chancellor, Ravenshaw University, Cuttack emphasized the changing concerns of research trends from a traditional to an interdisciplinary approach. He focused on industry connect research and innovation

which can fulfill the vision of NEP-2020 in higher education.

The Chief Guest, Prof Aparajita Chowdhury, Vice Chancellor, Rama Devi Women's University said that research is an integrated part of Higher Education. While highlighting research as common exposure to students now, she said that students can start research at 4 year UG level now as envisaged in NEP-2020. Faculty members and research supervisors need to inculcate natural curiosity among the young and budding researchers for quality enhancement in Research and Innovation. She focused on interdisciplinary and multi-disciplinary approaches which can be helpful in achieving the Sustainable Development Goals - 2030 and NEP-2020. Prof Chowdhury said that ethics in research can sustain the research eco-system better. Research and Innovation thus can develop the intellectual, analytical and critical capacities among the researchers. Further, she highlighted that research dissemination needs to be done to connect to the people. Organizing a research convention can raise research awareness among scholars. She expected research to be context specific taking local and contemporary issues into consideration and new areas of research to be promoted. She suggested that ethnographic studies need to be conducted on digital humanity and the post-COVID effect on living and development.

In his Presidential Address, Dr. Amarendra Pani, Director I/c and Head, Research Division, AIU anticipated the Student's Research Convention ushered in an unprecedented success in connecting budding researchers in research and innovation activities. He emphasized that there is a need of doing application and action-oriented research. A basic understanding of research needs to be known by the researchers. He suggested research be conducted for knowledge revision, generating and devising new tools to solve emerging problems at par with world-class level research activities. A vote of thanks was proposed by the senior faculty member, Dr B C Das. The inaugural session was coordinated by Ms. Sandhya Rani Pal.

After the inaugural session, the participants presented models/posters of their respective Research projects in five groups. They were from the following areas:

Basic Science: There were thirteen Projects in Basic Science Section. The Models/Posters were

assessed by three experts. This was moderated by Mr. Ranjit Giri, Faculty Member of the Department of Education.

Agriculture: There were seven Projects in Agriculture Section. The Models/Posters were assessed by three experts. This was moderated by Dr Gitanjali Mohanty, Faculty Member of the Department of Education.

Engineering and Technology: There were nine Projects in Engineering and Technology Section. The Models/Posters were assessed by three experts. This was moderated by Ms. Subhrajyotsna Biswal, Faculty Member of the Department of Education.

Health Science and Allied Subjects Pharmacy, Nutrition, etc.: There were nine Projects in Health Science and Allied Subjects Pharmacy, Nutrition, etc. section. The Models/Posters were assessed by three experts. This was moderated by Dr P B Binjha, Faculty Member of the Department of Education.

Social Science, Humanities, Commerce and Law: There were sixteen Projects in Social Science, Humanities, Commerce & Law section. The Models/Posters were assessed by three experts. This was moderated by Dr Ajay Kumar Mohanty, Faculty Member of the Department of Education.

Post-lunch session of the first day started with a stream-wise oral/podium presentation of 54 projects followed by interaction. As per the assessment of the experts, all projects were through for oral presentation. Student researchers presented their projects in Power Point mode which were assessed by the experts present. On the basis of the assessment of the model/poster presentation and podium/oral presentation and interaction with the student researchers, a stream-wise winner list was prepared by the experts and handed over to Dr. Amarendra Pani and Dr Usha Rai Negi, AIU, New Delhi. Spectrums of cultural events were presented by the students in the evening covering Odishi, classical dance, Sambalpuri dance, patriotic dance, semi-classical dance and Yoga dance and presentation of solo songs.

Day two began with a Plenary Talk on 'Industry-Academia Interface: NEP 2020' which was delivered by Prof Sanjay Kumar Nayak, Vice Chancellor, Ravenshaw University. Prof Nayak focused on Industry Connect Research. He expressed concerns

over the challenges being faced now in achieving the major reforms of higher education and research as envisaged in NEP- 2020 and SDGs 2030 for a sustainable system. He emphasized major reforms in curriculum upgrading, keeping faculty updated with industry and developments, linking instructional process to the world of works, making internship mandatory along with the training of faculties on inbuilt internship for four weeks, MoUs with public and private sector undertakings for creation of internship training facilities, establishment of IDEA Centres in selected institutions and bridging academia- industry gaps which can lead the students to employability and make them industry ready. He emphasized institutional orientation depicting strength with reference to infrastructural facilities and human resources to help the industry. He highlighted functional areas of industry connect, success parameters of outcome-based learning approach, and suggested steps of quality improvement for industry connect. Prof Nayak proposed two models such as Unique Academic-Industry Interface Model and Industry-Academia/Laboratory Partnership Model in view of fulfilling the requirements of industry for employability. A Vote of Thanks was proposed by Prof Sudarshan Mishra, Coordinator of Students Research Convention.

In the valedictory session of the Convention, Zonal Coordinator, Prof Sudarshan Mishra presented two-day report of the Convention. The distinguished guests were introduced and given a warm welcome by Dr B.C. Das.

The Chief Guest of the valedictory session, Prof H.K. Senapaty, Former Director, NCERT, New Delhi and Professor of Regional Institute of Education, Bhubaneswar emphasized the researches based on Indian ethos, culture and knowledge system while describing his concerns over the crucial time to implement NEP-2020 in school education, teacher education, technology use, higher education and research. He said that we are at a point of time for the creation of an equitable vibrant knowledge society and preparing global citizens. He expressed that learning to live together '*Vasudhaiva Kutumbakam*' is the root of Indian culture and civilization. Prof Senapaty focused on robust educational reforms under NEP-2020 by drawing attention to education–industry connect; adoption of outcome-based vocational

education for better employability in India; shifting academic focus from content mastery to competency mastery; the practice of subject-based pedagogy; and education and research with interdisciplinary, multi-disciplinary and collaborative approaches. He said that only 5% of students are opting for vocational education in India whereas 95% of students are opting for vocational education in South Korea. That is why our graduates are not employable and hence, NEP-2020 has given emphasis on vocational education. He focused on development of a curriculum framework for ECCE and Alternative Education like, School Education and Teacher Education. He emphasized for the contextualization of our research findings. He assured that we all have the ability and also doing our best in research but we need to think about how our research findings can best be disseminated and used by others. For this, all the institutions working at the top level and institutions working at the grassroot level need to join hands together for a better working culture.

Dr Amarendra Pani, Director I/c, Research Division, AIU, New Delhi announced the result of the winners of the Research Project competition.

The winners were given Medals and Certificates. It was announced by Dr. Pani that the National Level Students Research Convention will be held on March 16-17, 2023 at Ganpat University, Gujarat.

In her Presidential Address, Prof Asima Sahu, Chairperson, P G Council, Ravenshaw University said that research is not destination but a lifelong journey and the quest for knowledge is intrinsic to human life. Researchers' experiences inspire others to learn and imagine in novel way. Research requires creativity and original thinking. She emphasized that there is the need of increased allocation of budget in Research and innovation. The prevalent best practices in each field need to be focused. National Research Foundation has been proposed in NEP-2020 to develop a research ecosystem in our country. She said that most of the allocation being made for scientific research is for physical and natural sciences. Research in Social Sciences and humanities is also equally important. Nevertheless, it has been neglected for funding. There are issues like, how to connect with common people, climate change, green energy, and astronomy which need to

The following Student Researchers were felicitated

Name of the Project	Name of Participant	Name of University	Position
<i>Agriculture</i>			
Evapocooler	Jiban Jyoti Behera, Suvam Roy, Mahendra Kalyan Senapati	Gandhi Institute of Engineering and Technology University	1 st
Effect of Agricultural Modernisation on Marginal and Small- Scale Farmers in Context of Climate Change Using Geospatial Technology: A Case Study of Paschim Medinipur, West Bengal.	Pulakesh Pradhan	Ravenshaw University, Cuttack, Odisha	2 nd
Development of Easy and Cost-effective DNA Extraction and Purification Protocol	Amar Kumar Muska	Kalinga Institute of Social Sciences, Bhubaneswar, Odisha,	3 rd
<i>Basic Science</i>			
A Novel Fluorescence Turn-On Ratiometric Sensor Frame Work for the Detection of Creatinine in Aqueous Medium	Sujata Bais	Ravishankar Shukla University, Raipur, C.G.	1 st
Generation of Electricity by Using Waste Material	Asmita Patel, Jagadananda Swain, Mandakinee Bhoi	Dr C. V. Raman University, Kota, Chhattisgarh	2 nd
Dye Sensitized Solar Cell from Plant Pigment	Nishikanta Panda, Shashanka Shekhar Sahu, Kunal Pattanaik	Dr C. V. Raman University, Bilaspur	3 rd
<i>Engineering and Technology</i>			
Stochastic Computational Modeling Approaches for Characterization of Neuronal Communication Systems	Subhasmit Biswal	Ravenshaw University, Cuttack, Odisha	1 st
Intelligent Switch	Rohit Kumar Pattnaik, Suraj Kumar Patra, Krishnamrit Abhisek	GIET University Gunupur	2 nd
Object Distance Measurement Detection With Real-Time Camera For Surveillance Mechanism	Ritwik Dalmia, Aradhya Bratamay Majumder	Sri Sri University, Cuttack, Odisha	3 rd
<i>Health Science & Allied Sciences</i>			
Non-invasive Blood Glucose Detection via Exhale Breath Analysis with SPR Based Design using Three-layer Structures	Ashok Kumar Sahu	Berhampur University, Berhampur, odisha	1 st
Green Synthesis of Zinc Oxide Nanoparticles Using Banana Leaf Extract and Its Application in Sunscreens	Prativa Rout	Revenshaw University, Cuttack, Odisha	2 nd

Name of the Project	Name of Participant	Name of University	Position
Moss Air Purifier - An Eco-Friendly Natural Alternative To Mechanical Air Purifier	Jabamayee Barik, Bhabesh Kumar Nayak	Fakir Mohan University, Balasore, Odisha	3 rd
<i>Social Science, Humanities, Commerce and Law</i>			
Impact of Enterprise Resource Planning (ERP) Systems on Financial Performance of Regional Rural Banks (RRBs) of Odisha: An Empirical Study	Ashyashree Praharaj	Berhampur University, Berhampur, Odisha	1 st
Smiling Soul	Soumya Podha, Sameer Jain, Partha Pratim Khamari	Rajendra University, Balangir, Odisha	2 nd
Lived Experiences of Transgender towards Parental and Social Support for their Education: A Phenomenological Study	Pranayini Sahoo, Jateendra Das, Prajakta Das	Ravenshaw University, Cuttack, Odisha	3 rd

be investigated through research. Our Hon'ble PM has added the slogan of 'Jay Anusandhan'. There is a need for infrastructural development in higher

education institutions to facilitate research activities. At the end, Dr. S K Rout proposed a vote of thanks. The Programme ended with National Anthem. □

*This Issue coinciding
8th March is being published to
commemorate United Nations
International Women's Day*

THESES OF THE MONTH

SOCIAL SCIENCES

A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of Dec 2022-Jan 2023)

Commerce

1. Gahlawat, Rajesh. **Consumer buying behaviour towards online shopping.** (Dr. Deepak Gupta), Department of Commerce, Indira Gandhi University, Meerpur.

2. Luhade, Santoshkumar Arti. **Financial analysis of small scale fried gram industries in Nanded District.** (Dr. Harnawale C K), Department of Commerce, Swami Ramanand Teerth Marathwada University, Nanded.

3. Mohite, Aarti Arvind. **A study of financial and societal impact of CSR spending by selected private sector companies in India.** (Prof. Ketan Upadhyay), Faculty of Commerce, M S University of Baroda, Vadodara.

4. Nagpal, Asmita. **Impact of financial literacy on saving, investment and credit pattern of service sector employees.** (Dr. Meera Bamba), Department of Commerce, Indira Gandhi University, Meerpur.

5. Sapna Kumari. **Performance evaluation of selected public and private banks in India.** (Dr. Pinki Rani), Department of Commerce, Indira Gandhi University, Meerpur.

6. Sharma, Manjeet. **A study of consumer perception and green buying behaviour towards green marketing practices with reference to FMCG products.** (Dr. Seema Mehlawat), Department of Commerce, Indira Gandhi University, Meerpur.

Economics

1. Abbas, Syed Saleha Javed. **An economics analysis of government policy measures and expenditure pattern on elementary education in Greater Mumbai: A case study of Mankhurd-Govandi.** (Dr. S C Patra), Department of Economics, S.N.D.T. Women's University, Mumbai.

2. Patni, Sana. **A study of financial literacy among the women entrepreneurs in South Mumbai.** (Dr. Harshada Rathod), Department of Economics, S.N.D.T. Women's University, Mumbai.

3. Swati. **The Impact of globalization on poverty unemployment and inequality in India.** (Dr. S S

Chauhan), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

Education

1. Jane, Sherly. **A study of leadership styles of women principals of grant-in aid secondary schools of Vadodara.** (Prof. Dipti Oza), Department of Education, M S University of Baroda, Vadodara.

2. More, Sarita Annaso. **Adhyayan nishpatti nikshanusar Marathi vishyacha adhyapanantar iyatta satvichya vidhyatharyamadheel sampadnukeecha abhyas.** (Dr. B G Girgaonkar), Department of Education, Swami Ramanand Teerth Marathwada University, Nanded.

3. Pujdekar, Hiranman Sarang. **Sarvagya Shri Chakradhar Swamichey shaikshanik vichar: Ek chikitsak abhyas.** (Dr. Nilkanth S Patil), Department of Education, Swami Ramanand Teerth Marathwada University, Nanded.

4. Thakur, Manisha. **Adjustment of undergraduate students in relation to their personality, social intelligence and general intelligence.** (Dr. Rajvir Singh), Department of Education, Kurukshetra University, Kurukshetra.

Law

1. Katiyar, Rahul. **Analyzing impact of digital information sources of Indian manufacturing exporting firms.** (Dr. Mohd Imran), School of Law and Constitutional Studies, Shobhit Institute of Engineering & Technology, Meerut.

2. Pattjoshi, Seemasamiti. **Third party funding in international commercial arbitration: A study with reference to India.** (Dr. Puranjay Ghosh), Department of Law, Kalinga Institute of Industrial Technology, Bhubaneswar.

3. Rai, Amit. **Role of media in protecting human rights.** (Dr. Sudha Garg and Dr. M P Singh), School of Law and Constitutional Studies, Shobhit Institute of Engineering & Technology, Meerut.

4. Sharma, Manoj. **Polluter pays principle-role of NGT in its implementation in sugar industry.** (Dr.

Rashmi K Nagpal), School of Law and Constitutional Studies, Shobhit Institute of Engineering & Technology, Meerut.

Library & Information Science

1. Parekh, Rashmi Anantra. **Management system in libraries of Doordarshan Centres in India: A survey.** (Dr. Prayatkarbhai Kanadia), Department of Library and Information Science, Gujarat Vidyapith, Ahmedabad.

Management

1. Agarwal, Kushik. **Study of risk management by state owned power sector companies in India.** (Dr. Anuj Goel), Department of Management Studies, Shobhit Institute of Engineering & Technology, Meerut.

2. Bakshi, Ishan. **Indian cuisine as a tourist attraction: Stakeholders perspectives.** (Dr. Surjeet Kumar), Department of Tourism and Hotel Management, Kurukshetra University, Kurukshetra.

3. Bhattacharya, Sujoy. **Impact of customer satisfaction on performance of Indian petroleum companies.** (Dr. Anuj Goel), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

4. Bhusan, Biswa. **Impact of training on developing skills: A study of Indian IT industry.** (Dr. Ashok Kumar Sar), Department of Management, Kalinga Institute of Industrial Technology, Bhubaneswar.

5. Dubey, Somprabh. **Impact of micro-financing in sustainable economic development, employment and Poverty Alleviation: A study with special reference to Kumaon Region.** (Dr. Ashok Kumar), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

6. Hemanth Babu, R. **A study on customer relationship management practices in select hotels of Bangalore.** (Dr. N Giri Babu and Dr. T Narayana Reddy), Faculty of Management, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

7. Kamal Singh. **A study on determinants of consumer buying behavior with reference to Indian footwear retail sector.** (Dr. Abhishek Kumar), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

8. Kawale, Pallavi Prabhakar. **A critical study of self help groups in Nanded District.** (Dr. V N Laturkar), Department of Management, Swami Ramanand Teerth Marathwada University, Nanded.

9. Khan, P Hameem. **A study on competency based HR practices and their impact on employee**

retention with reference to IT companies of Hyderabad Region. (Dr. Aliya Sultana and Dr. T Narayana Reddy), Department of Management, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

10. Khan, Surender. **Analyzing impact of digital information sources on international marketing strategies: A study of Indian manufacturing exporting firms.** (Dr. Anuj Goel and Dr. Sudhir Rana), Department of Management Studies, Shobhit Institute of Engineering & Technology, Meerut.

11. Kothacheruvu, Srilatha. **Analysis of employee engagement practices in cement industry: A comparative study of select companies in Andhra Pradesh.** (Dr. P Murali Krishna and Dr. T Narayana Reddy), Department of Management, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

12. Malhotra, Hemani. **Study of sweepers in residential building: An ergonomic intervention.** (Dr. Manjit Kaur Chauhan), Faculty of Management, S.N.D.T. Women's University, Mumbai.

13. Mesaria, Swatabahen Dhanjibhai. **An ergonomic assessment of the municipal primary school teachers of selected two cities of Gujarat State.** (Dr. Neerja Jaiswal), Advanced Centre of Environmental Studies and Sustainable Development, M S University of Baroda, Vadodara.

14. Naidu, G Rakesh. **A study on impact of social media marketing on the voter behaviour with reference to Andhra Pradesh.** (Dr. E Lokanadha Reddy and Dr. T Narayana Reddy), Department of Management, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

15. Neha Rani. **Impact of workforce diversity on the performance of teachers and management: A study of private higher education institution in national capital region of India.** (Dr. Anuj Goel), NICE School of Business studies, Shobhit Institute of Engineering & Technology, Meerut.

16. Padmaja, V Rama. **Problems and perspectives of groundnut production and marketing with special reference to Anantapur and Kadapa.** (Dr. P V Vijay Kumar Reddy), Department of Management, Koneru Lakshmaiah Education Foundation, Guntur.

17. Parmeshwari. **An empirical evidence on impact of Nifty future volatility on Nifty spot.** (Dr. P V Vijay Kumar Reddy), Department of Management, Koneru Lakshmaiah Education Foundation, Guntur.

18. Shringarpure, Ruta Vivek. **An empirical study of measurement of brand equities for selected consumer durable vis-avis non-durable products in Western**

Indian rural market. (Dr. U R Dangarwala), Faculty of Commerce, M S University of Baroda, Vadodara.

19. Shripad, Bandivadekar Shraddha. **A study of consumer online buying behaviour for medicines in India.** (Dr. Ashok Kumar), Department of Management Studies, Shobhit Institute of Engineering & Technology, Meerut.

20. Sunitha, G. **Impact of credit rating factors on credit risk of select public sector banks (With special reference to State Bank of India, Punjab National Bank, Bank of India, Union Bank of India and Bank of Baroda).** (Dr. V Venu Madhav), Department of Management, Koneru Lakshmaiah Education Foundation, Guntur.

21. Talluri, Kiran Sai. **A critical analysis of the effect of ERP on SMEs productivity in Andhra Pradesh: An empirical study.** (Dr. A Srikanth and Dr. Ambatipudi Rama Kumar), Department of Management, Koneru Lakshmaiah Education Foundation, Guntur.

22. Venugopal, Kavuluru. **Impact of human resource development interventions on firm profitability in construction industry: Mediating role of waste management practices: A study of selected enterprises in Telangana.** (Dr. A Udaya Shankar and Dr. Abhilasha Ambatipudi), Department of Management, Koneru Lakshmaiah Education Foundation, Guntur.

Physical Education & Sports

1. Nandekar Ishwar Dattatrya. **Ek salag prashikshan va yog prashikshan karyekramacha athletics khelanduchya sharirik kshamta, sharirkriya ghatkavar hona-ya parinamacha abhyas.** (Dr. Venkat Mane), Department of Physical Education, Swami Ramanand Teerth Marathwada University, Nanded.

Political Science

1. Palei, Jajneswari. **Energy poverty, gender equality and women's rights: A comparative study of Jajpur and Keonjhar District of Odisha.** (Prof. Ramakrushna Pradhan), Department of Political Science, Fakir Mohan University, Balasore.

2. Pandya, Jagruti Kantibhai. **A study on the socio-political situation of Gurubrahmin Society of Gujarat.** (Dr. G M Butani), Department of Political Science, Veer Narmad South Gujarat University, Surat.

3. Rathod, Sunil Kashiram. **Manregachya Ambaljavneet grampanchayatichi bhumika: Vishesh sandarbh Latur Jilhya.** (Dr. Gaikwad Vishwambar Dharma), Department of Political Science, Swami Ramanand Teerth Marathwada University, Nanded.

Psychology

1. Payal. **Paranormal beliefs in relation to personality, meaning in life, religiosity and modernity.** (Dr. C R Darolia), Department of Psychology, Kurukshetra University, Kurukshetra.

2. Sah, Jonali. **Psychosocial factors and train accidents: A study to develop a training module for reducing accidents due to human errors by train drivers.** (Prof. Urmi Nanda Biswas), Department of Psychology, M S University of Baroda, Vadodara.

Social Work

1. Krishan Kumar. **Labour welfare measures in co-operative sugar mills of Haryana: An appraisal.** (Dr. Darshan Singh), Department of Social Work, Kurukshetra University, Kurukshetra.

2. Vaniya, Kasturiben Rameshchandra. **Atrocities on dalits: Forms, reactions and its effects on the community (Considering eleven sensitive District of Gujarat.** (Dr. Hiteshbhai Jagani), Department of Social Work, Gujarat Vidyapith, Ahmedabad.

Sociology

1. Bambhaniya, Laljibhai Nathabhai. **Unnatural death of women in Saurashtra: A sociological study (In reference to Bhavnagara District of Saurashtra Region in Gujarat State.** (Dr. Gidharbhai Patel), Department of Sociology, Gujarat Vidyapith, Ahmedabad.

2. Joginder. **Dwivar vivah pratha: Haryana ke gram in aanchal mein paristhitijanya bahupatni vivah pratha ka samajshastriy vishleshan.** (Dr. Sunil Kumar), Department of Sociology, Kurukshetra University, Kurukshetra. □

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2.	Physics	02		S.T. – 01
3.	Zoology	02		VJ (A) – 01
4.	Botany	02		NT (C) – 01
5.	Computer Science	02		O.B.C. – 03
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7.	Commerce	03	M.Com. with B+, SET / NET / Ph.D.	OPEN – 06

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- The candidates belonging to reserved category should submit one copy of their application to the Dy. Registrar, Special Cell, Dr. B.A.M. University, Aurangabad.
- Candidates who are already in service should apply through proper channel.
- The complete application should be submitted to **The Principal, Janvikas Mahavidyalaya, Bansarola, Tq. Kaij, Dist. Beed (M.S.) 431518.**
- **Contact No. : 9422469586, 9823660682**

**Sau. Rajamati Tat
President**

**Dr. Babasaheb Gore
Principal**

Rahemaniya Taleemi Society's
**Deshmukh Arts, Commerce and Science Varishtha Mahavidyalaya,
Kasar Sirsi, Tq. Nilanga, Dist. Latur
(Affiliated to Swami Ramanand Teerth Marathwada University, Nanded)**

WANTED

Application are invited for the post of **Principal** to be filled in **Deshmukh Arts, Commerce and Science Varishtha Mahavidyalaya, Kasar Sirsi, Tq. Nilanga, Dist. Latur (Permanent Non-Granted)** run by **Rahemaniya Taleemi Society, Nilanga (Minority Sanstha)**. Eligible Candidate should submit their application along with all necessary documents **within 15 days** from the date of publication of this advertisement by Register Post only.

Sr. No	Post	No. of Post	Full Time	Reservation
01	Principal	One	Full Time	Unreserved

For more detailed information about post qualification, form, salary and other terms and conditions, please visit university website : www.srtmun.ac.in

Note:

- 1) Due to Administrative reasons advertisement of the same college published on the date 06/02/2023 – Sakal News Paper and 07/02/2023 – Punyanagari News Paper is cancelled.
- 2) The Candidates who had applied against above dated advertisement of the college need to apply afresh.

Address for Correspondence

The President/Secretary,
Deshmukh Arts, Commerce and Science
Varishtha Mahavidyalaya, Kasar Sirsi- 413607
Tq. Nilanga, Dist. Latur
Mobile No. 9960888907, 9975469123

**President/Secretary
Rahemaniya Taleemi Society
Nilanga**

St. MARY'S COLLEGE MANARCAD

Malam P.O., Manarcad, Kottayam, Kerala, Pin. 686 019

Affiliated to Mahatma Gandhi University, Kottayam

Managed by St. Mary's Jacobite Syrian Charitable & Educational
Society (Reg.No.K.303/2003)

0481 2373383; 6238289678; stmaryscollegeprincipal@gmail.com

WANTED ASSISTANT PROFESSORS

Applications are invited from eligible candidates to the following posts of **Assistant Professors** in St. Mary's College, Manarcad, Kottayam against permanent vacancies. One vacancy is 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. 15.02.2021. Scale of Pay, Qualifications, Age *etc.* will be as per the norms of UGC/ University/ Government of Kerala. Application form can be downloaded from the college website (www.stmaryscollege.ac.in) on an online payment of Rs.2000/-. Duly filled application along with copies of all the required documents should reach the Principal **within 30 days** from the publication of this notification.

Subject	No. of Posts	Open quota	Community quota	Persons with Disability quota (Visual Impairment)
ENGLISH	4	2	1	1
CHEMISTRY	2	1	1	0
PHYSICS	4	3	1	0
COMMERCE	2	0	2	0
ZOOLOGY	2	1	1	0
HINDI	1	1	0	0
PHYSICAL EDUCATION	1	1	0	0

(Sd/-)
Manager

Rahemaniya Taleemi Society's

(Minority Sanstha)

Deshmukh Arts, Commerce and Science Varishtha Mahavidyalaya,

Kasar Sirsi, Tq. Nilanga, Dist. Latur

Affiliated to Swami Ramanand Teerth Marathwada University, Nanded

WANTED

Applications are invited for the post of **Assistant Professor** to be filled in **Deshmukh Arts, Commerce and Science Varishtha Mahavidyalaya, Kasar Sirsi, Tq. Nilanga, Dist. Latur (Permanent Non-Granted)** run by **Rahemaniya Taleemi Society, Nilanga (Minority Sanstha)**. Eligible Candidate should submit their application along with all necessary documents **within 15 days** from the date of publication of this advertisement by **Registered Post** only.

Sr. No	Subject	No. of Post	Type
1	Commerce	01	Full Time
2	Physics	01	Full Time
3	Chemistry	01	Full Time
4	Botany	01	Full Time
5	Zoology	01	Full Time
6	Director Physical Education	01	Full Time
7	Librarian	01	Full Time

For more detailed information about post, qualification, form, salary and other terms and conditions, please visit university Website : www.srtmun.ac.in

Note:

- 1) Due to Administrative reasons advertisement of the same college published on the date 06/02/2023 – Sakal News Paper and 07/02/2023 – Purnyanagari News Paper is cancelled.
- 2) The Candidates who had applied against above dated advertisement of the college need to apply afresh.

Address For Correspondence

The President/Secretary,
Deshmukh Arts, Commerce and Science
Varishtha Mahavidyalaya, Kasar Sirsi - 413607
Tq.Nilanga, Dist. Latur
Mobile No. 9960888907,9975469123

President/Secretary
Rahemaniya Taleemi Society
Nilanga

ST. XAVIER'S COLLEGE – MAPUSA – GOA
Minority Institution under Article 30(1) of the Indian Constitution
(Affiliated to Goa University) (Grant-in-Aid)

Re-Accredited by NAAC with 'A' Grade with a CGPA Score of 3.12 (4th Cycle)

Applications stating full name, Address, Age with date of birth, Educational Qualifications (from S.S.C.E. onwards) with marks and percentages secured and experience, contact no. are invited from Indian Nationals for the following posts:

(1) Assistant Professor in Physics - 01 Post (Regular)

Essential Qualifications:-

1. Master's degree in the relevant subject with atleast 55% marks or its equivalent grade and good academic record. The candidate must have the Master's degree as well as Bachelor's degree in the same subject for which he/she is being appointed unless he/she has passed the Post Graduate examination under the change of faculty scheme.
2. Candidate should have cleared the Eligibility Test for Lecturers conducted by UGC/CSIR such as NET/SET or similar test accredited by UGC. However, candidates who have been awarded the Ph.D. degree in compliance with the UGC (minimum standards and procedures for award of Ph.D. degree) Regulations, 2009 or 2016, as incorporated in the relevant Goa University Ordinance, shall be exempted from the requirement of the minimum eligibility condition of NET/SET for recruitment and appointment of Assistant Professor. In case candidate having passed the said Eligibility Test/Ph.D. are not available, or found suitable, candidates fulfilling all other conditions would be considered for appointment on Contract/Lecture Basis (subject to the approval of the Goa University/Govt. of Goa and/or as per the prevailing guidelines of Goa University/Govt. of Goa) on purely temporary basis.
3. The candidates registered for the Ph.D. programme prior to July 11,2009 shall be governed by the provisions of SC-16.4.1.
4. Knowledge of Konkani is essential.
5. Knowledge of Marathi is desirable.

SERVICE CONDITIONS FOR ABOVE POST:-

As per the provisions of Goa University, UGC, Directorate of Higher Education, Govt. of Goa, Diocesan Society of Education and other competent authorities.

Application along with attested photocopies of all educational qualifications from S.S.C.E. onwards, Birth Certificate, valid Residence Certificate in Goa should reach **within 20 days** from the date of publication of the advertisement.

Candidate should submit 15 years Residence Certificate from competent authority stating that the candidate was residing in Goa.

Age: Not exceeding 45 years (relaxable for Govt. Servants up to 5 years in accordance with the instructions/orders issued by the Government from time to time) for all above posts.

Candidates who are already employed shall send their applications through proper channel and shall account for break in service, if any, in their academic career.

Incomplete applications will be rejected outright.

The right to fill up the above-mentioned post is reserved.

Applications should reach, The Principal, St. Xavier's College, Mapusa, Goa – 403 507, within 20 days from the date of Advertisement by superscribing on the envelope "Application for the post of".

Date: 02/03/2023

Sd/-
Fr. Antonio F. Salema
Administrator
St. Xavier's College, Mapusa, Goa



Swarnim Gujarat Sports University, Desar

(Established by Government of Gujarat)

OPP. Taluka Seva Sadan Desar, Near Valavav Cross Road,

At Post. Desar, Ta. Desar, Dist. Vadodara-391774

Invites Online Application from Qualified Candidates for Following Posts

Employment Notification No. 01/2023

Department of Physical Education														
Sr. No.	Name of Post	Total No. of Post	Category Wise Post					Out of Category Wise Post Reserved for Woman					Pay Band/ Pay Level (as per six Pay)	
			Gen.	SC	ST	SEBC	EWS	Gen.	SC	ST	SEBC	EWS		
1	Professor	02	01	00	00	01	00	00	00	00	00	00	00	37400-67000 GP-10000/-
2	Associate Professor	03	02	00	00	01	00	01	00	00	00	00	00	37400-67000 GP-9000/-
3	Assistant Professor	06	02	01	01	01	01	00	00	00	01	00	00	15600-39100 GP-6000/-
Total		11	05	01	01	03	01	01	00	00	01	00		

Department of Advance Training & Coaching														
Sr. No.	Name of Post	Total No. of Post	Category Wise Post					Out of Category Wise Post Reserved for Woman					Pay Band/ Pay Level (as per six Pay)	
			Gen.	SC	ST	SEBC	EWS	Gen.	SC	ST	SEBC	EWS		
1	Professor	01	01	00	00	00	00	00	00	00	00	00	00	37400-67000 GP-10000/-
2	Associate Professor	02	01	00	01	00	00	00	00	00	00	00	00	37400-67000 GP-9000/-
3	Assistant Professor	02	01	00	00	01	00	01	00	00	00	00	00	15600-39100 GP-6000/-
Total		05	03	00	01	01	00	01	00	00	00	00		

Department of Sports Science														
Sr. No.	Name of Post	Total No. of Post	Category Wise Post					Out of Category Wise Post Reserved for Woman					Pay Band/ Pay Level (as per six Pay)	
			Gen.	SC	ST	SEBC	EWS	Gen.	SC	ST	SEBC	EWS		
1	Professor	01	01	00	00	00	00	01	00	00	00	00	00	37400-67000 GP-10000/-
2	Associate Professor	02	01	00	00	01	00	00	00	00	00	00	00	37400-67000 GP-9000/-
3	Assistant Professor	03	02	00	01	00	00	01	00	00	00	00	00	15600-39100 GP-6000/-
Total		06	04	00	01	01	00	02	00	00	00	00		

Prescribed Qualifications, Experience, and other details are available on the website: <https://sgsu.gujarat.gov.in>
Commencement of online form will start from DT: 06-03 -2023. Last date of final submission of On-line Application Form: DT: 20-03-2023, 11.59 P.M. Hard copy of online application should reach to The Registrar, Swarnim Gujarat Sports University, at the above-mentioned address, on or before DT: 27-03-2023 during office hours. Applications received after the prescribed date will not be accepted. Applications will be accepted only through speed-post/registered post (RPAD) only. Incomplete applications in any form will be summarily rejected.

Registrar
Swarnim Gujarat Sports University
Desar

SANGOLA TALUKA UCHCHA SHIKSHAN MANDAL'S
SANGOLA MAHAVIDYALAYA, SANGOLA
Tal. Sangola, Dist. Solapur, Maharashtra
(Affiliated to Punyashlok Ahilyadevi Holkar Solapur University, Solapur)

AIDED (NON-MINORITY)

Applications are invited from eligible candidates for the following Posts of **Assistant Professor** :-

Sr. No.	Subject Designation	No-Objection Certificate given by Govt. of Maharashtra Vacant Posts	No-Objection Certificate given by Govt. of Maharashtra Posts Reservation
1	History	01	Open - 02 OBC - 02 EWS - 01 VJ-A - 01
2	Economics	01	
3	Statistics	01	
4	Geography	01	
5	Political Science	01	
6	Commerce	01	
Total post		06	

CONDITIONS :

- Open post is open to all, however, candidates from any category can apply for the post.
- Educational Qualification and other requirements are as prescribed by the UGC Notification dated 18th July 2018, Govt. of Maharashtra Resolution No. Misc 2018/C.R.56/18 UNI -1 dated 8th March 2019 and University Circular No. PAHSUS/Estt/7th pay /2019/2285/dated 25th March 2019.
- A relaxation of 5% shall be allowed at the Bachelors as well as at the Masters Level for the candidates belonging to SC/ST/OBC Non-Creamy Layer/Differently-abled for the purpose of eligibility and assessing good academic record for direct recruitment.
- Reserved candidates, who are domiciled out of Maharashtra State, will be treated as open category candidates.
- Reserved candidates should also to send a copy of their application to the Deputy Registrar, Special Cell, Punyashlok Ahilyadevi Holkar Solapur University, Solapur.
- Application received after the last date will not be considered. The College will not be responsible for postal delay, if any.
- Reservation for PWD, Women and Disable persons will be as per the Govt. norms.
- Reserved category candidates shall produce the Caste Validity Certificate as per the directives issued by the State Government vide Circular No.BCC-201/Pra.Kra. 1064/2011/16B dated 12-12-2011.
- Reserved category candidates (except SC/ST) shall produce Non-Creamy Layer Certificate at the time of interview.
- Reservation for VJNT Categories is internally transferable.
- Applicants who are in service must send their application through proper channel.
- Applicants are required to account for breaks, if any, in their academic career.
- T.A., D.A. will not be paid for attending the interview.
- Applications with full details should reach through the channel Secretary, Sangola Taluka Uchcha Shikshan Mandal, Sangola to Principal, Sangola Mahavidyalaya, Sangola, Taluka. Sangola, Dist. Solapur- 413307 **within 15 days** from the date of publication of this advertisement.
- Incomplete application will not be entertained.
- All the Terms & Conditions are applicable as mentioned in the NOC letter No. JDHESolapur/NOC/2019/4 dated 31.01.2023 from Hon. Deputy Secretary, Higher and Technical Education Dept, Govt. of Maharashtra, Mumbai and letter No. DJD/HE/SDS/2023/170 dated 01.02.2023, Hon. Deputy Director of Higher Education, Solapur Division, Solapur.
- All the Terms & Conditions are applicable as mentioned in the GR Dated 12.11.2021 from Higher and Technical Education Department of Government of Maharashtra.
- Please note that the recruitment procedure initiated by this advertisement subject to decision by Hon. Bombay High-Court, Aurangabad Bench on Writ Petition No. 12051/2015.
- This is University approved advertisement.
(for application form visit Website : www.sangolacollege.org)

Place : Sangola.
Date : 06/03/2023

Secretary/Principal
Sangola Taluka Uchcha Shikshan Mandal,
Tal. Sangola, Dist. Solapur – 413 307

**Tapasvi Public Charitable Trust Yeoti's
Venkatesh Mahajan Senior College, Dharashiv (Osmanabad)**

APPOINTMENTS

Applications are invited from eligible candidates for the following granted posts. Qualified Candidates should apply **within 15 days** from the date of publication of the advertisement.

Sr. No.	Subject	Designation	No. of Posts	Reservation
1	Chemistry	Assistant Professor	01	ST-01,
2	Mathematics	Assistant Professor	01	VJ(A)-01,
3	Computer Science	Assistant Professor	01	NT(B)-01,
4	Zoology	Assistant Professor	02	OBC-02,
5	Physics	Assistant Professor	01	EWS-01
Total			06	

Permission as per NOC No. JDHE Aurangabad/NOC/2019/9 Dated 31/01/2023.

Terms and Condition:

1. Reserved candidates should send application to the Secretary and one copy to Deputy Registrar, Special Cell, Dr. Babasaheb Ambedkar Marathwada University, Chatrapati Sambhaji Nagar (Aurangabad).
2. 30% reservation will be applicable for ladies as per Government Regulation No. sankirn 1096/ p.k. 30/off-2 dated 01 August, 1997.
3. 4% reservation will be given to person with physically disable (PWD)/ Divyang candidates as per Government Resolution No. pwd/ 2018 p.k/ 14/16- B, Ministry, Mumbai dt. 29 May 2019.
4. Relaxation of 5% marks just like candidates having minimum 50% instead of 55% will be allowed to P.G level for SC/ ST candidates as per Government Resolution No. NGC- 1298 (4619)/UNI-4 Dated 11 December 1999.
5. Reservation for VJ-A, NT-B, NT-C and NT-D will be interchangeable as per resolution-2001(2004).
6. Relaxation of 5% marks at PG level will be given to persons with physically disable (PWD) candidates as per Government Resolution No. USG 2003/(21)/HD-4 Higher and Technical Department, Ministry, Mumbai-32 dated 14 November 2003.
7. Reserve candidates can also apply for open category. Post of open category will be filled up on Merit Basis.
8. 1% reservation will be orphanage as per Government Resolution No. dated 02 April 2018 and 04 December 2018.
9. 10% reservation is given to the 'Economically Weaker Section (EWS)' from open category so there may be some changes in the post of open category as per Government Resolution. Secretary General Administration, Ministry Mumbai dated 31 January 2019 and Deputy Secretary Government of Maharashtra dated 02 February 2019.
10. Reservations are decided as per 100 points scale from all sanction post. Government Regulation dated 18 October 1997, 21 September 1998, 21 September 2016 and 18 February 2019 Gazette dated 25 February 2022, 01 April 2022, 08 April 2022 Government Resolution dated 25 February 2022, 11 April 2022 & 06 July 2021.
11. Educational qualification, pay scale and allowances for the post of Assistant Professor will be as per Norms of UGC, Govt of Maharashtra and Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.
12. Eligible candidates who are already in service should submit their applications through proper channel.
13. All attested Xerox copies of certificates and other relevant documents should be attached with the application.
14. No T.A. and D.A. will be paid to the candidates.
15. Said Vacancies are being filled subject to the final decision of Hon'ble Court Writ Petition No.12051/2015.
16. Application should be sent by Registered Post on the address given below :-

Secretary, Tapasvi Public Charitable Trust Yeoti, C/o Principal, Venkatesh Mahajan Senior College, Samarth Nagar, Sanja Road, Dharashiv (Osmanabad) (M.S.), Pin-413501.

Advertisement is available : www.vmcollege.org

**Principal
Venkatesh Mahajan Senior College,
Dharashiv (Osmanabad)-413501**

**Secretary
Tapasvi Public Charitable Trust, Yeoti
Ta. & Dist. Dharashiv (Osmanabad)-413501**

**Shri Chatrapati Shivaji Shikshan Prasarak Mandal Goregaon
Late Baburao Patil Arts & Science College,
Hingoli, Dist. Hingoli**

WANTED

Applications are invited for the eligible post candidates for the following full time posts in **Late Baburao Patil Arts & Science College, Hingoli, Dist. Hingoli** (Non-Grant) and run by **Shri Chatrapati Shivaji Shikshan Prasarak Mandal Goregaon**. The applications duly completed in all respect should reach on the following address in **15 days**. The candidates of reserved category should send one copy of application to the **Assistant Registrar, Special Cell, S.R.T.M. University, Nanded**.

Sr. No.	Subjects	No. of Posts	Reservation
1	Botany	04	Open – 06
2	Zoology	04	SC – 02
3	Physics	01	ST – 01
4	Mathematics	02	VJA – 01
5	Chemistry	03	NTB – 01
6	Microbiology	03	NTC – 01 OBC – 03 EWS - 02

I. Assistant Professor Eligibility (A or B)

- I. A Master's Degree with 55% marks (or an equivalent grade in a point-scale wherever the Grading system is followed) in a concerned /relevant/allied subject from an Indian University, or an equivalent degree from an accredited foreign university.
- II. Besides fulfilling the above qualifications, the candidate must have cleared the National Eligibility Test (NET) conducted by the UGC or the CSIR or similar test accredited by the UGC, like SET or who are or have been awarded a Ph.D. Degree in accordance with the University Grants Commission (Minimum Standards and Procedure for Award of M.Phil/Ph.D. Degree) Regulations, 2009 or 2016 and their amendments from time to time as the case may be exempted from NET/SET.

Provided the candidates registered for the Ph.D. programme prior to July 11, 2009, shall be governed by the provisions of the then existing Ordinances /Bye-laws/Regulation of the Institution awarding the degree and such Ph.D. candidates shall be exempted from the requirement of NET/SET for recruitment and appointment of Assistant Professor or equivalent positions in University/College/Institutions subject to the fulfillment of the following conditions :

- a) The Ph.D. degree of the candidates has been awarded in regular mode only.
- b) The Ph.D. thesis has been evaluated by at least two examiners.
- c) An Open Ph.D. viva voce of the candidate has been conducted.
- d) The candidate has published two research papers from his/her Ph.D. work, out of which at least one is in a referred journal.
- e) The candidate has presented at least two papers, based on his/her Ph.D. work in conference/seminars, sponsored/funded/supported by the UGC/ICSSR/CSIR or any similar agency.

Note :

1. The fulfillment of these conditions is to be certified by the Registrar or the Dean (Academic affairs) of the University concerned.
2. NET/SET shall also not be required for such Masters Programmes in disciplines for which NET/SET is not conducted. However, Ph.D. degree shall remain the minimum eligibility for appointment of Assistant Professor in such disciplines.

OR

The Ph.D. degree has been obtained from a foreign university/institution with a ranking among top 500 in the World University Ranking (at any time) by any one of the following :

- I. Quacquarelli Symonds (QS);
- II. The Times Higher Education (THE) or
- III. The Academic Ranking of world Universities (ARWU) of Shanghai Jiao Tong University (Shanghai).

Note :

The Academic score as specified in Appendix-ii (Table 34) for Universities and Appendix-ii (Table 38) for Colleges, shall be considered for short-listing of the candidates for interviews only, and the selection shall be based only on the performance in the interview.

Correspondence Address :-

Late Baburao Patil Arts & Science College,
Akola By-pass, Garmal Road, Mahakali Nagar,
Hingoli. Dist. Hingoli – 431513.

Contact : 9970367707 / 7887933999

**Principal
Late Baburao Patil Arts & Science College,
Hingoli, Dist. Hingoli**

**President/Secretary
Shri Chatrapati Shivaji Shikshan Prasarak
Mandal Goregaon**

ASSOCIATION OF INDIAN UNIVERSITIES

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राष्ट्रीय औषधीय शिक्षा एवं अनुसंधान संस्थान (नाईपर)

**NATIONAL INSTITUTE OF PHARMACEUTICAL
EDUCATION & RESEARCH (NIPER)**

(Department of Pharmaceuticals, Ministry of Chemicals & Fertilizers)

Sector – 67, S.A.S. NAGAR (MOHALI) - 160062, Punjab

www.niper.gov.in Ph: 0172-2292000, 2214682-83 & 2214688

RECRUITMENT NOTICE FOR TEACHING AND NON-TEACHING POSTS

(Advt. No.03/2023 dated 04.03.2023)

The National Institute of Pharmaceutical Education & Research (NIPER), SAS Nagar (Mohali) is an autonomous Institute of National importance set up by the Government of India, Ministry of Chemicals & Fertilizers by an Act of Parliament, to impart higher education and undertake advanced research in the field of Pharmaceutical sciences, technology and management.

Applications are invited from the eligible candidates for the following vacant posts through direct recruitment basis as under:

Group	Name of the post	No. of vacancies	Cat.	Maximum Age (as on the last date of Advertisement)	Pay Matrix Level as per 7th CPC
A	Assistant Professor (Pharmaceutical Management)	01	UR	45 years	Level-12A (Academic Pay Level) (Rs.1,01,500-1,67,400)
A	Technical Supervisor Gr. I/ Scientist Gr. I	01	EWS	40 years	Level-10 (Rs.56,100-1,77,500)
B	Assistant Gr. I (Finance & Accounts)	01	UR	40 years	Level-06 (Rs. 35,400-1,12,400)

Applicants are requested to read the instructions carefully before applying. For detailed description of educational qualification, experience, other eligibility criteria and general information, please visit Institute website www.niper.gov.in/jobs.html.

Last date for submission of application form is **03.04.2023 (Monday) by 05.00 pm** i.e. 30 days from the date of publication in Employment News. Duly filled in application form may be submitted through speed post/registered post/courier/by hand on or before the last date of submission of application.

कार्यवाहक कुलसचिव