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## ASSOCIATION OF INDIAN UNIVERSITIES

### INVITES

#### VIEWS AND SUGGESTIONS ON IMPLEMENTATION OF NATIONAL EDUCATION POLICY-2020

Association of Indian Universities constituted a Committee of Vice Chancellors on '**Implementation of National Education Policy-2020**' to examine the issues pertaining to the difficulties encountered in the implementation of NEP--2020 and to suggest pragmatic solutions for fast-tracking its implementation.

The purpose of the Committee is to look into the major recommendations of National Policy of Education-2020, take stock of its implementation and suggest measures and strategic implementation plan to the Governments at the Centre/ States and the HEIs, keeping in view the difficulties faced by HEIs in implementation of NEP-2020. The Committee shall (i) look into the subtle aspects of the recommendations of NEP-2020, identify the challenges and difficulties and suggest a workable implementation strategy with time line (ii) find possible and plausible solutions to address the difficulties faced by the institutions (iii) present the status report of implementation of NEP-2020 to be prepared within three months to the Honorable Union Minister of Education, Government of India.

***The Committee will come out with a structured roadmap with timelines for implementation of NEP-2020 which shall help the Government and other regulatory and apex bodies and Institutions of Higher Educational to assume their respective roles in its expedient implementation.***

In this process of preparing the Roadmap, AIU intends to seek feedback from as many stakeholders and practitioners as possible to make it a comprehensive and influential document.

At present, the Committee is in the process of seeking opinions from experts in the field of Higher Education on different aspects through a Feedback Form, '**Feedback Survey on Operationalization of NEP-2020 by HEIs**' which is available on AIU Website: **www.aiu.ac.in**.

Readers of the University News are also invited to provide feedback through the Feedback Survey form on or before **31 October, 2021** through Google form via link: **http://meet.google.com/wry-ppyt-qeo**. To have a comprehensive view of the Feedback Form, the PDF is available on AIU Website: **www.aiu.ac.in**.

**For further details please email to [sgoffice@aiu.ac.in](mailto:sgoffice@aiu.ac.in)**

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# Measurement of Students' Satisfaction: An Empirical Study of the Maharaja Sayajirao University of Baroda

Parimal H Vyas\*

The prevalent academic environment of higher education institutions is highly competitive and the measurement of students' satisfaction is important in formulating strategies and allocation of resources as well as for attracting students. Students' Satisfaction is one of the important factors to measure success or failure any higher educational institution. Alike businesses, progressive efforts are now being made by higher education institutions for attracting students and also for keeping them satisfied with offering of a wide range of different educational services and facilities which too is helpful in building its academic reputation and positive image in the eyes of different stakeholders.

## Review of Literature on Measurement of Students' Satisfaction

The review of literature on measurement of students' satisfaction as available in India revealed much about student satisfaction. Sharma, P. B., Vij Sanjna (2019) had advocated that the quality of higher education in India should reach new heights with innovations and global exposure coming and disrupting the education system. N. Sundarajan (2019) argued that the willingness of the higher education sector to help the teachers and encourage them to learn and accomplish their professional goals play an important role in creating a student-centric environment. This leads to improvement in students' learning and at the same time acts as rewards for competent teachers. For creating student-centric environment, some actions can be planned by the higher education sectors viz., revision of professional standards for a teacher engaged in higher education; offer 'Teaching Excellence Awards'; focus on the quality of education rather than quantity; introducing new methods for objectively measuring teachers' performance and effectiveness; introduction of feedback mechanism; development of local support for educational institutions; focus on 'Teaching Excellence' while hiring and promoting teachers; promoting research activities through offering incentives and allocation of funds for research; establishment of "Excellence Forum" for developing expertise in higher education institutions and extending support for teaching pedagogy.

Mandeep Kaur and G. S. Bhalla (2019) had measured students' satisfaction in Guru Nanak Dev University, Amritsar, Punjab and concluded that learning behaviour of students was influenced

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by the environment in which they are studying, and its components included personal and social development of students; behaviour of clerical staff; teaching quality; library facilities; career oriented education, and availability of amenities viz., regular electric supply in campus, Wi-Fi facility, purified water facility, medical facility, and scholarships. Meena, Prasad (2018) had assessed students' satisfaction at Women's College, Samastipur and found that higher student-teacher ratio is the cause for the less personal attention of their teachers; no time available with the teacher to clarify the students' doubts and to conduct extra classes. Annamdevula Subrahmanyam, et al. (2016) measured and developed a model to link quality of service in education and loyalty of students in oldest state universities of Andhra-Pradesh and concluded that the age and gender were the keys for differing perceptions among students about service quality and their loyalty.

Thomas, Sam (2015) developed a model to demonstrate the linkages between the loyalty of student with student's perception and satisfaction from the education institutions located in south India and concluded that reputation of the educational institution and students' satisfaction was the key driver for the loyalty of students. Kaur, Harpreet. Bhalla, G.S. (2015) had measured students' satisfaction from higher education institutions in Punjab and revealed that the physical infrastructure facilities, opportunity for getting placement, learning environment in the campus, students' engagement in extra-curricular activities, support to students for academic activities were the key factors related with the satisfaction of students.

Vipin Kumar (2014) had measured the students' satisfaction in public higher educational institutes in Sirsa District, Haryana, and identified the factors related with students' satisfaction viz., behaviour with the students and regularity of teacher's in conducting classes, parking space in the campus, the fees charged for the different courses offered and well-equipped library. Students were found to be dissatisfied with non-availability of latest laboratory instruments and gadgets of IT tools, poor opportunities for their placement and availability of limited sports facilities respectively. Shetty, Bhavna, R., Gujarathi, Rajashree (2012) had concluded that

contended faculties were the source of satisfaction to students.

Palli, Janardhana, Gundla., Mamilla, Rajasekhar (2012) had linked the factors related with service quality such as viz., reliability, assurance, tangibility, empathy and responsiveness with students' satisfaction at S.V. University Tirupati, Andhra Pradesh and found that those students who had studied self-supporting/self-interest courses were found to be more satisfied than students who had learnt other courses not supporting their self-interest. Further, female students were found to be more satisfied than male students. Senthilkumar, N., Arulraj A. (2011) had developed a model for measurement of service quality in higher education in the region of Chennai, Coimbatore, Madurai, and Tiruchirappalli, that had identified significant factors viz., quality of faculties, the physical resources, range of courses in a varied discipline offered, as well as employability and placement of students.

Mahapatra and Khan (2007) had proposed a model 'Adequate' to measure the level of satisfaction of different stakeholders in education capable of evaluating the service quality of technical education. Mahiah, et al. (2006) had suggested that tangible facilities in the higher education institutions, assurance, compassion, and receptiveness shown by the administration and Human Resource Department were key to increase the students' and employees' satisfaction. Ali and Zairi (2005) had advocated for the significance of continuous monitoring of students' positive or negative opinion to keep on improving and upgrading the academic services delivered to them by higher education institutions. Sohail and Shaikh (2004) had found that the physical surroundings of the campus, the arrangement in a given layout, illumination in classrooms, the appearance of buildings in a campus, and the overall hygiene maintained in a campus as some of the factors that influenced students' satisfaction.

## **Research Methodology**

An empirical research study was conducted to examine students' satisfaction at the Maharaja Sayajirao University of Baroda (MSUB), Vadodara in the State of Gujarat. It was based on exploratory and descriptive research design and the primary data were collected using statistically validated

structured non-disguised questionnaire from total number of 32,062 students across 14 faculties of the MSUB. The key objective of the research study was to assess the various service quality dimensions of academic and educational services as determinants of measurement of students' satisfaction as delivered by the MSUB, Vadodara.

The other objectives concerning measurement of the students' satisfaction of this research study were viz., to know students' opinion on selected aspects viz., teaching/learning and evaluation; performance improvement, discussions, mentoring, support and counselling by teachers; students' life cycle adopted at MSUB; infrastructural facilities like Canteen, Hostel, Sports, Internet, Library, Laboratories, Health Centre etc.; and administrative support and counselling; to search for and assess the critical service quality dimensions that influences overall experiences of students' satisfaction; to identify focus areas to formulate and implement strategic action taken plan for improving the quality of educational services at the MSUB, Vadodara. The required information and primary data were collected from total number of 32,062 students considered as representative sampling units or respondents who were pursuing either Degrees or Diplomas at the Undergraduate (UG) or Postgraduate (PG) level in different academic programmes being offered by the MSUB, Vadodara in the academic year 2019-2020.

The primary data were collected using statistically validated non-disguised structured questionnaire which consisted total number of 34 items/statements concerning teaching, and learning experiences of the students. The reliability of the structured questionnaire was measured and the Cronbach's alpha score was found as 0.912 for students' opinion for teachers of university and 0.909 for factors related to higher education institution.

The primary data were analyzed using frequency distribution, percentages and averages and hypotheses were tested by applying chi-square test. The Structural Equation Model [SEM] was developed to establish the relationships between educational services offered vis-à-vis students' satisfaction based on selected criteria from the teachers' perspective and higher education institution's perspective respectively.

## **Summarised Results**

The overall results of data analysis mainly revealed that considering the responses of all the students for syllabus covered in the classroom, 80 per cent of the students reported that more than 70 per cent of the syllabus was covered in the classroom. Their responses for preparedness of teachers, communication by the teachers, teachers' approach to teaching, and explanation of concepts through examples, applications & illustrations were found as positive. More than 80 per cent of the students shared that teachers were found as effective in conveying the topics taught to them and came well prepared for the classes. About 36 per cent of students stated that the internal examination papers were evaluated fairly. About 45 per cent of them had shared that teachers discussed regarding students' performance in the internal examinations sometimes, and more than 50 per cent had reported that their overall performance was discussed only sometimes. The students had reported inadequate responses for fairmindedness in the evaluation of mid-semester/internal evaluations which calls for more transparency and openness in teaching and evaluation schemes. More than 50 per cent of them positively expressed about opportunities given to them for internship, exchange/field visits etc. More than 65 per cent of the students had given positive feedback about learning opportunities given to them by the university. 60 per cent of the students agreed that the teacher coordinated with them in the assigned task whereas 36 per cent responded that the co-ordination from teachers occurred occasionally. The students' responses for support and guidance extended by respective teacher in identifying his or her strength and weaknesses as well as availability of teachers' support and guidance in challenges being faced and in overcoming their weaknesses too was positively supported by more than 45 per cent of them. 35 per cent of them also suggested improving teachers' support in their learning experiences. More than 50 per cent of the students had revealed that the teachers' sometimes use ICT in teaching-learning process. For administrative support extended to students, it was felt satisfactory as reported by 59 per cent of the students.

## **Results of Factor Analysis and Chi-square Test Applied to Measure the Association of Students' Responses on Selected Criteria of Satisfaction**

The factor analysis was used and the result

**Table-1: Chi-Square Value of Association Between Selected Factors of Satisfaction and Students' Responses**

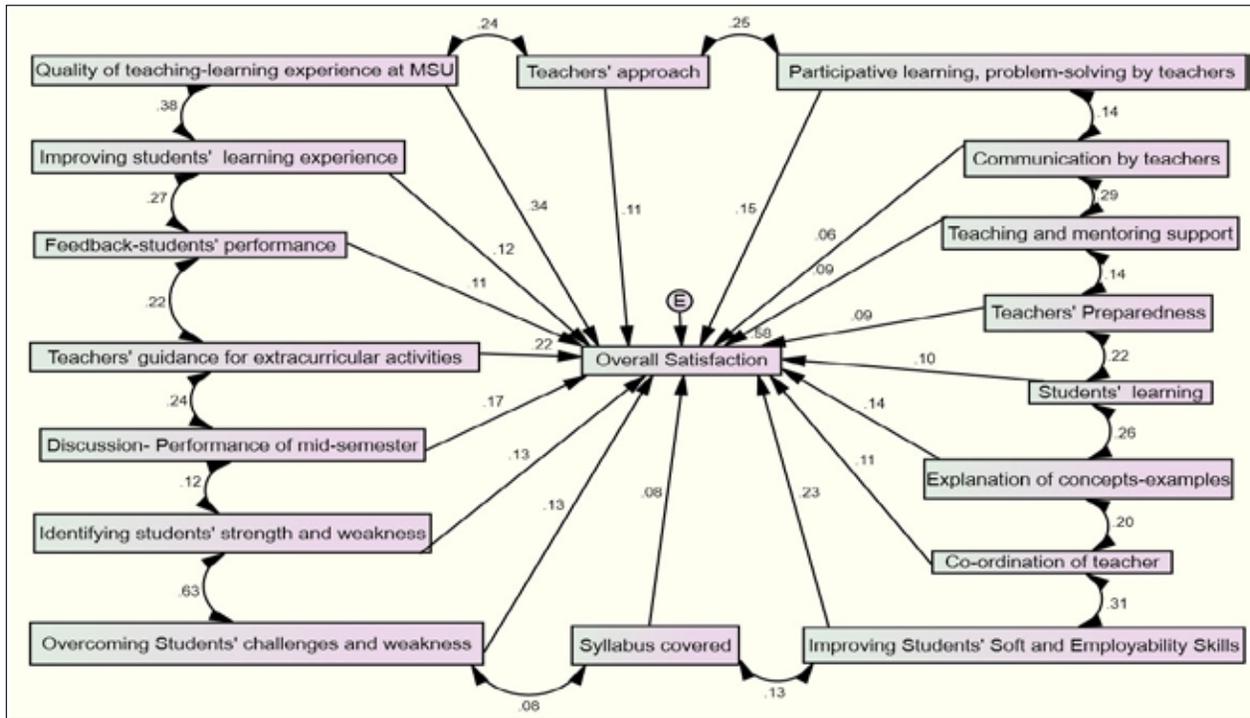
Sr. No.	Selected Criteria of Measurement of Students' Satisfaction	Gender		Academic Programme			Factor Loading Score
		Male	Female	UG	PG	DIP	
		'P' Value of X <sup>2</sup> Test					
01	Syllabus covered in the Class	S 0.000	S 0.000	S 0.000	S 0.019	S 0.001	<b>0.720</b>
02	Preparedness of teachers	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	<b>0.708</b>
03	Communication by the teachers	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.603
04	Teachers' approach to teaching	S 0.000	S 0.000	S 0.000	S 0.001	S 0.001	0.629
05	Fairness in the evaluation of mid-semester	S 0.000	S 0.000	S 0.000	S 0.001	S 0.000	0.590
06	Discussion on the performance of mid-semester	S 0.000	S 0.000	S 0.000	S 0.031	S 0.000	<b>0.700</b>
07	Opportunity for students in internship, exchange	S 0.000	S 0.000	S 0.000	NS 0.109	S 0.008	<b>0.701</b>
08	Teaching and mentoring support	NS 0.057	S 0.000	S 0.000	S 0.015	S 0.000	0.512
09	Opportunities to students for learning	S 0.001	S 0.000	S 0.000	NS 0.140	S 0.000	0.441
10	Discussion and feedback on students' performance	S 0.001	S 0.039	S 0.000	S 0.000	S 0.033	0.584
11	Support and co-ordination of teacher	S 0.000	S 0.000	S 0.000	NS 0.178	S 0.008	0.420
12	Explanation of concepts through	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.563
13	Teachers' support in identifying students' strength and weakness	S 0.000	S 0.000	S 0.000	S 0.000	S 0.013	<b>0.748</b>
14	Teachers' support in overcoming challenges and weakness	S 0.000	S 0.000	S 0.000	S 0.001	S 0.023	<b>0.729</b>
15	Teachers' support in improving students' learning experience	S 0.000	S 0.000	S 0.000	S 0.015	S 0.001	<b>0.741</b>
16	Participative learning, problem-solving and sharing by teachers	S 0.000	S 0.000	S 0.000	S 0.021	S 0.004	0.686
17	Teachers' guidance for extracurricular activities	S 0.000	S 0.000	S 0.000	NS 0.107	S 0.001	0.680
18	Teachers' support in improving Soft and Employability Skills	S 0.000	S 0.000	S 0.000	NS 0.220	S 0.000	0.696
19	Use of ICT by teachers	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.394
20	Quality of teaching-learning experience at MSU	S 0.000	S 0.000	S 0.000	NS 0.683	S 0.000	0.685
21	Co-curricular and Extra-curricular activities in Campus	S 0.002	S 0.000	S 0.000	NS 0.315	S 0.000	0.665
22	Student life at MSU Campus	NS 0.069	S 0.000	S 0.000	S 0.000	S 0.000	0.634
23	Cleanliness in MSU Campus	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.491
24	Canteen facility in MSU Campus	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.657
25	Hostel facility in MSU Campus	S 0.000	S 0.000	S 0.000	NS 0.092	S 0.000	<b>0.810</b>
26	Wi-Fi facilities in MSU Campus	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	<b>0.773</b>
27	Sports facilities in MSU Campus	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.589
28	Library facilities	S 0.002	S 0.000	S 0.000	NS 0.074	S 0.000	0.594
29	MSU Website	NS 0.087	S 0.000	S 0.000	S 0.000	S 0.001	0.657
30	Infrastructural facilities in MSU campus	S 0.000	S 0.000	S 0.000	S 0.000	S 0.000	0.642
31	The facility of the health center	S 0.000	S 0.000	S 0.000	NS 0.055	S 0.000	0.584
32	Administrative support	S 0.000	S 0.000	S 0.000	NS 0.113	S 0.000	<b>0.704</b>
33	Student Support Services	S 0.000	S 0.000	S 0.000	S 0.013	S 0.001	<b>0.717</b>
34	Guidance for Career Counselling and Placement	S 0.000	S 0.000	S 0.000	NS 0.067	S 0.000	0.627

**S= Significant Result and NS= Non-Significant Result**

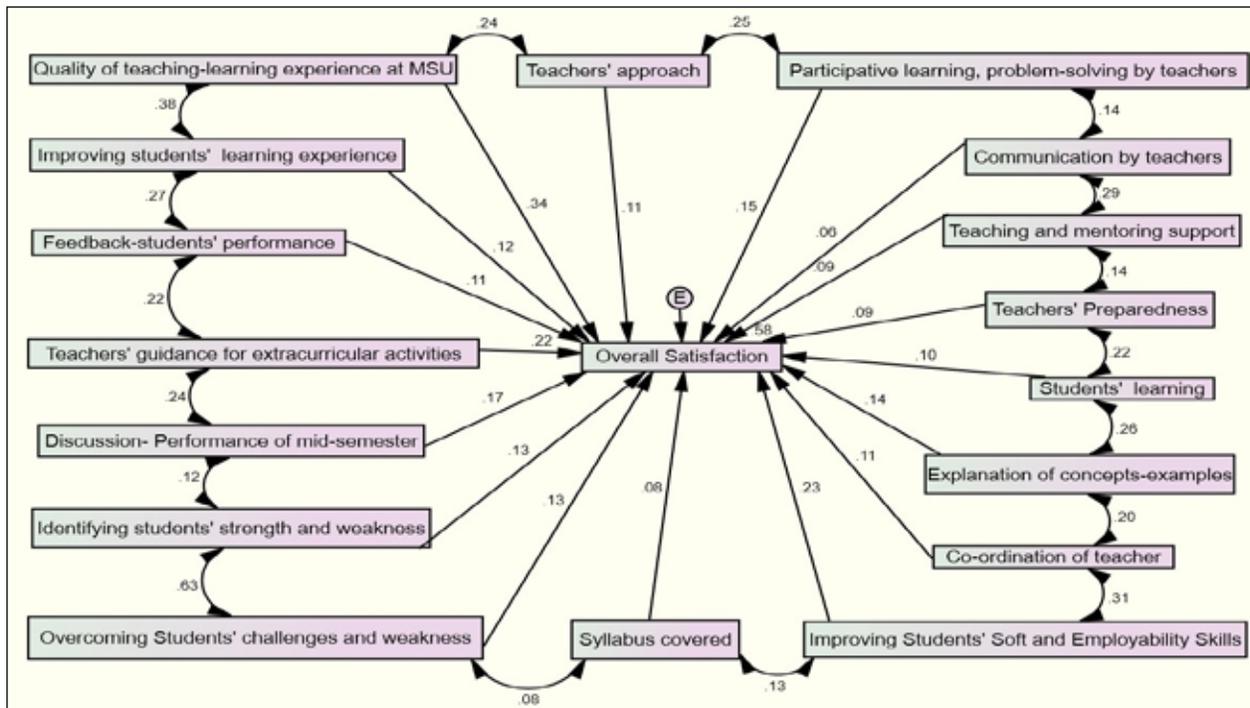
of KMO measure of sampling adequacy (0.950, and 0.943) and Bartlett's Test of Sphericity (0.00) indicates suitability of data for application of factor analysis as well as chi-square test was applied to test the hypotheses and its results are presented below.

**H01:** There is no association between opinion/response on selected factors of satisfaction of male and female students as well as Undergraduates (UG), Postgraduate (PG) and Diploma (DIP) students studying in different years in all the faculties of the

**Figure No. 1: SEM Showing Relationship between Factors Related with Teachers' Perspective and Overall Satisfaction of Students**



**Figure No. 2: SEM Showing Relationship Between Factors Related with Higher Education Institution's Perspective and Overall Satisfaction of Students**



MSUB, Vadodara. From the results of the chi-square as given in the Table Number 01, it was found that both the hypotheses stand rejected as 'P' Value of

Chi-square was  $< 0.05$ , except three criteria for male and twelve criteria for Postgraduate students where the insignificant result was observed.

The results of the factor analysis has brought out the key determinants of favourable students' satisfaction viz., syllabus covered in the class, preparedness of teachers, discussion with students about his/her performance in the mid-semester examinations, opportunity for students in internships and student exchange, teachers' support in identifying students' strength and weaknesses, teachers' support in overcoming challenges and weakness, teachers' support in improving students' learning experience, hostel facilities in MSU campus, Wi-Fi facilities in MSU campus, student support services and administrative support respectively whereas in case of those factors where loading score is less than 0.7 implies that the MSUB needs to put efforts for bringing out improvement in it in near future.

**Structural Equation Model Showing Relationship Between Factors Related with Teachers' Perspective and MSUB Perspective with Overall Satisfaction of Students**

The relationship of factors related to teachers' perspective and overall satisfaction of students are presented in the Structural Equation Model [SEM] in Figure Number -1 from which it becomes clear that all the criteria considered for measuring the influence of factors related to teachers' perspective on student's satisfaction does not reflect equal/ similar weightage and it falls in the range of 0.6 to 0.34.

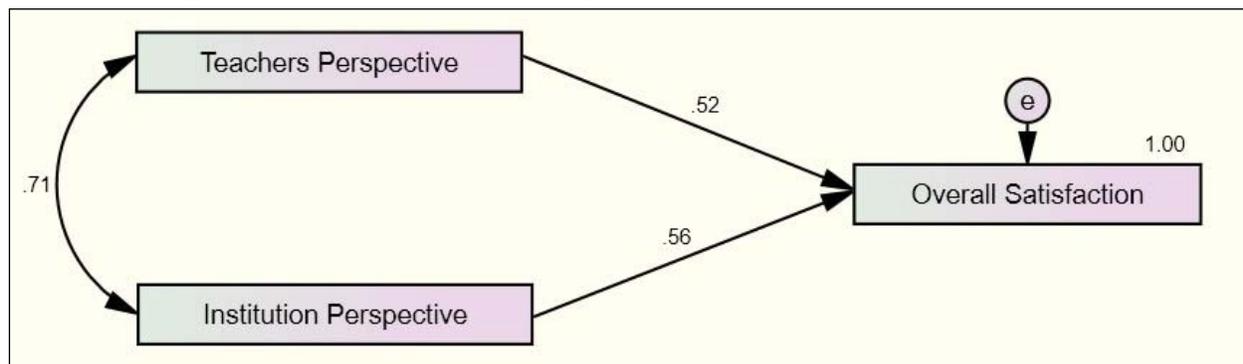
Relationship of factors related to the institution's perspective and overall satisfaction of students are displayed in the Figure Number 2. From the Figure 2 of the SEM, it was found that all the selected criteria considered for measuring the influence of selected factors related to the MSUB's perspective did not reveal equal/ similar weightage and it fall in the range of 0.9 to 0.27.

Figure No. 3 Shows the relationship between factors related with teachers' perspective, higher education institution's perspective with overall satisfaction of students. From the Figure 3 of the SEM, it was observed that factors related with teachers' perspective and the MSUB's perspective showed weightage of 0.52 and 0.56 which meant that the role of teachers and the MSUB is equally important. Teachers are expected to extend all kind of support and guidance to students for their growth and development, and the MSUB should provide and deliver all kinds of possible academic, infrastructural, financial and support facilities as well as services to students and also to its teachers respectively. Strategic Focus Areas and Initiatives Implemented by the MSUB, Vadodara is shown in Table-2.

**Findings and Implications of the Research Study**

Apart from the role of teaching-learning activities in delivery of satisfaction to students, the quality of teaching and positive support and active participation of teachers' is critical in improving the students' performance in academic, research, and extension activities as well as for developing his/her communication, interpersonal and human skills along with entrepreneurial and or employability skills considering futuristic needs of students. The complete personality development of students depends on opportunities offered to them in academic, research, and extension activities. The MSUB has been successful in attracting students from almost each of the States across India and International students considering certain factors viz., hostel facilities; library facilities, and offering of interdisciplinary subjects. Its library facilities still need further strengthening and its student-centric facilities are helpful in fostering research and learning attitude among students.

**Figure No. 3: SEM Showing Relationship Between Factors Related with Teachers' Perspective, Higher Education Institution's Perspective with Overall Satisfaction of Students**



**Table 2: Strategic Focus Areas and Initiatives Implemented by the MSUB, Vadodara**

<b>Selected Criteria</b>	<b>Strategic focus Area (s) of the MSUB</b>	<b>Illustrative List of Initiatives Implemented Gradually by the MSUB, Vadodara</b>
Syllabus covered in the Class	Accountability and Responsiveness on Syllabus Covered	To consider part of the course in Academic Programme to be completed from MOOC and SWAYAM To consider weighted credits obtained from such Courses
Preparedness of Teachers	Course Outcomes to be linked with Session Plan and Academic Calendar	To prepare sessions' plan fine-tuned with academic calendar by teachers
Communication by the Teachers	Training/Orientation Programmes for Teachers Peer Participation Monitoring and Feedback	To enhance continual Participation of teachers in Training/Orientation Programmes To organize Training/Orientation Programmes for teachers To strengthen mentoring of newly appointed teachers by experienced faculty members
Fairness in Evaluation of Mid-Semester/Internal Examinations	Initiation of Evaluation/Examination Reforms	To institutionalize mechanism for ensuring analysis of results To conduct Online Mid-Semester/Term-end Examinations To ensure digitization of Examination processes To ensure real-time result monitoring of evaluation/examination reforms
Discussion on performance of Mid-Semester/Internal Examinations	feedback in class room submission of Report(s)	To institutionalize mechanism for ensuring feedback in class room To ensure mentoring of students by teachers
Opportunity for Students in Internship, Exchange, Field Visit etc.	Continuous Internal Evaluation Weightage/Credit to Internships/ Field Work/ Industrial/ Institution Visits/ Exchange Visits etc.	To further strengthen linkages with industries and research institutes etc. To increase teachers' engagement for Exchange/ Field Visits etc. To offer Certificate course in consultation with Peers, Alumni etc. To Offer Twinning Programmes with provision for credit transfer and portability To set up Centre for students' Internship To provide funding from MSUB and Government for Apprenticeship Stipend to students To offer academic credit for start-up and innovation
Discussion and Feedback on student Performance	Performance Feedback through Mentoring	To institutionalize mechanism for Mentoring and Counselling of students
Support and Guidance by teacher in identification of Identify Student's Strength and Weakness	Identification of slow and fast learners Remedial and Bridge Courses Counselling and mentoring	To institutionalize mechanism for Identification of slow and fast learners To identify teachers and students and assign them task to regularly hold counselling sessions with students who need such support and guidance

<b>Selected Criteria</b>	<b>Strategic focus Area (s) of the MSUB</b>	<b>Illustrative List of Initiatives Implemented Gradually by the MSUB, Vadodara</b>
Teachers' Support and Guidance to student in overcoming challenges and weakness	Counselling and Mentoring	To increase and improve awareness of teachers for Counselling and Mentoring To improve teachers' involvement and participation for student support and guidance
Teachers' guidance and support for extracurricular activities.	Sensitization and Awareness of students Calendar of Extra-Curricular Activities	To strengthen awareness of teachers of extracurricular activities. To plan extracurricular activities in academic calendar
Teachers' support in improving your Soft Skills and Employability skills	Introduction of Compulsory Certificate course on Soft Skills Rigorous focus on practical exposure	To ensure continuous Counselling and Mentoring to students To strengthen activities of Skill Development Centre, Tinkering Centre, Incubation Cell and Start-up Centre To establish Centre for Flagship Programs
Use of ICT by teachers (LCD Projectors, Multimedia etc.)	Sensitizing teachers about ICT as an effective teaching tool Use of Whiteboards, Smartboards and Smart Class Rooms	To improve ICT Infrastructure To conduct training programmes for teachers To implement University Learning Management System To offer Short Term Training Programmes for teachers for development of e-resources
Students' Life in MSU Campus	Continual assessment of campus facilities and amenities Generate opportunities for personality development through career and counselling, training sessions, placement opportunities, Capacity and character building through value-based education	To establish centre for extension activities viz., Drama, Vocal, Cultural, Food Festival, Fine Arts etc. To appoint student representatives for increasing involvement in such activities
Cleanliness in MSU Campus Canteen facility in MSU Campus Hostel facility in MSU Campus Wi-Fi facilities in MSU Campus Sports facilities in MSU Campus	Engagement and Participation of students and staff in creating, delivery, maintenance and improvement of various facilities	To construct separate hostel for International students' as well as Boys' & Girls' Hostel To integrate diverse Students' Associations considering the State and Region of his/her origin useful for deciding for the Hostel accommodation and Celebration of their local festivals
Administrative support	Orientation of students for arrangement of administrative services Training of Teaching and Non-teaching staff Design manual for administrative and student support services	To appraise the students about arrangement of administrative services and its functionality To inform students about the mobile application MSUB e-Suvidha To promote and strengthen online grievance redressal
Student Support Services	Continual assessment of facilities and amenities meant for students	To Strengthen Students' Facilitation Center, and Counselling Center of the MSUB To improve Sports facilities for students To conduct Sensitization Programmes for Administrative staff members

Selected Criteria	Strategic focus Area (s) of the MSUB	Illustrative List of Initiatives Implemented Gradually by the MSUB, Vadodara
Guidance for Career Counselling and Placement	Generate opportunities for Personality Development through Career and Counselling, Mentoring, Training Sessions, Placement opportunities.	<p>To Strengthen Center for Career Advancement of Students of the MSUB</p> <p>To improve online/offline placement and training activities</p> <p>To conduct Hackathons, Training/Interaction sessions in collaboration with industries</p> <p>To improve linkages with local industries</p> <p>To strengthen collaborations at departmental level for designing certificate course sand also online e/ offline Skill Development Activities , Training, Internships, Mentorships, Career Counselling, Placement activities with support of local industries</p> <p>To enhance activities of Office of Office of Corporate Affairs, Office of Alumni affairs and Donor Relationships of the MSUB</p>

The students have appreciated the facilities of Health Centre of the MSUB but expect supplementary health facilities which are uncovered in current medical benefits. They have positively responded for the support services received from the ‘Students’ Facilitation Centre’. They seek to develop and enhance set of diverse skills via training, apprenticeship and internship programmes. The credit of skill improvement would be attributed to the teaching-learning experience delivered by empowered teachers of the MSUB. The university Governance should still further ensure transparency, trust, and creditworthiness which can transpire into the values and realise its vision and mission statements as envisaged by the MSUB. It should put efforts to strengthen and improve student incubation and start-up initiatives for students to ideate, incubate as well as nurture start-ups in the era of entrepreneurship. The academic calendar of the university should consider and plan field trips, students exchange programmes as well as industry placements etc.

The university needs to strengthen its activities of career counselling, training and placement for students supported with the help of embedded learning and psychometric testing tools. It should explore mechanism of single window agency for academia-industry interface. The university is expected to put efforts for providing vocational training and skill-based education to bridge the gap between theory and practice with specific emphasis on various disciplines. The university should also enhance its linkages and collaborations for improving students’ understanding on the concerned subject/area.

A mechanism of developing Strength, Weaknesses, Opportunities, and Challenges (SWOC) of students in the university needs to be introduced to identify learning objectives for students. From the perspective of other academic institutions by promoting the MSUB, as a melting point of cultures to promote itself as well as city of Vadodara an education hub. The MSUB needs to bring resurgence by empowering its teachers as brand ambassadors who promote students’ learning through various e-learning platforms along with the conventional classroom teaching pedagogy.

The teachers, university administrative officials and support staff should deploy efforts to improve on what they are delivering based on the outcome of unbiased and measurable students’ satisfaction which depends on teaching, facilities, environment and fulfilment of their expectations from the university.

### Concluding Remarks

The Higher Education Institutions (HEIs) must create student-centric educational learning modules by collaborating and by developing modules wherein students can earn credits which can be transferred as and when the need arises. The participative learning model should revolve around students with new teaching pedagogies aimed at problem-solving, decision-making skills through the application-oriented applied approach. The role of mentoring and student progression should be traceable as well as scalable in which teachers should be allotted a particular number of students for mentoring, and project and research work.

Taking into consideration the perspective of the HEIs, it is essential that necessary prudence should be exercised in terms of evaluation of students in examinations to consider classroom participation as well as the application of learnt theories. The role of ICT in teaching-learning process needs to be given top priority with inclusion and emphasis on use of e-learning modules, Massive Open Online Learning Courses (MOOCs), and ICT based tutorials. The start-up eco-system in the university too needs a major revamp.

Today's competitive academic environment of HEIs has raised the expectations of the students and if they perceive that management of the HEIs does not reveal care towards their complaints, they indeed may not wait and will put an effort to identify an effective channel to voice their grievances or search for other options, if available. Majority of students and parents especially place their hopes on HEIs and get rid of such HEIs that they perceive as offers a bleak future for their students. Further, the governance of the educational HEIs rests upon the philanthropy of the key decision-makers of the top brass and the policies governing students from time to time.

Thus, the outcome of the analysis of this in-depth empirical research study is useful in identifying core competencies, unique features as well as key strengths and weaknesses of the MSUB, its teachers, and supporting non-teaching and administrative staff which in turn would also be helpful not only to the MSUB alone but also to various other higher education institutions in designing, delivering and also improving the delivery of quality of higher education to students in near future.

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# Trends and Emerging Perspectives of Research in Social Sciences

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“No research is better than bad research”

Jayant V. Narlikar

The story of social sciences has two different parts, which are located differently at highly unequal levels. In the West, social sciences freely emerged within the Western context of modernity, whereas in India and in most of the non-Western countries they were brought from outside and institutionalized as an important constituent of Western colonial enterprise. That is why, social sciences in India before independence, particularly during the nineteenth century, acted, by and large, as an instrument of the colonial rule. Their main purpose was to generate data about the economic, social and cultural life of the native population for colonial administration (Parsuraman, 2005). During the freedom struggle, the nature and position of social sciences led by scholars like Radhakamal Mukherjee, D.P. Mukherjee, D.N. Majumdar, Iravati Karve, G.S.Ghurye and N.K.Bose changed a bit owing to their critical reflections on the colonial rule and indigenous culture and society. Anthropology which later became dominant subject among social sciences was the child of colonialism as it was intended to know the native customs, social life and cultural spectrum of the native population in general and primitive communities in particular.

In his book ‘Social Anthropology in India: A Social Science Orientation’ L.P. Vidyarthi, a leading icon of Indian Anthropology, has given a critical appraisal of the Indian social scientists in general and social anthropologists in particular. The book aims at highlighting some of the basic factors in the genesis and stages of development in social, cultural researches in India. In general Vidyarthi makes a strong plea that Indian social science should not overlook what may be termed its “Indianness” (Vidyarthi, 1976). This Indianness in the field of social science refers to our distinct cultural milieu

and value–attitude system as well as a body of ideas of Indian thinkers reflected in ancient scriptures, which are full of social facts and should be used in the understanding of the cultural process and civilization history of India. Continuing his search of India’s contribution in research methodology, Surjit Sinha observes that Indian anthropologists, in general, have not paid much attention to devising a special research methodology for studying the unique layout of the cultural patterns and processes of the sub-continent. The period proved quite creative in the academia and outside though there was no fund available for research.

Research in post independence phase became inevitable component of higher education and broadly speaking higher education has three basic objectives: production of knowledge, application of produced knowledge and transmission of knowledge to the masses for welfare of society. Teaching is indeed an important part of a university’s range of activities. But no less important is research. Unless the teaching faculty is involved with research as well, the system will become stale and sterile. Research brings in fresh air from outside and it revitalizes the teaching. Dictionaries relate the origin of the word ‘university’ to the Roman word *universitas*, which implies the universe, everything included, of knowledge and information. The Hindi equivalent of *university* is *Vishwavidyalaya*, again implying the comprehensiveness of a university. Thus, one can say that a university is a place where education is imparted, degrees are given and research conducted in order to expand the frontiers of knowledge in all different fields.

Keeping this meaning in sight, one perceives the key role of research in a university. For, with the above definition, a university cannot afford.

Nicholas Dirks pointed out more than a decade ago that the Indian state is barely visible to comparative sociology (Dirks, 1993). The lack of attention in social science research to the diversity of traditions in the political organizing of social life and state formation in general in pre-colonial India lies at the root of the gaps in the sociology of State

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in India. At the same time there is a strong case for social science research in India to turn towards a more political study of Indian society in particular caste and religion, their interplay and relationship with institutions such as political parties. It is a telling comment that some of the most significant work in these areas has, at least in the recent past, has tended to come from foreign scholars or those located abroad.

This trend, however, dominates disciplines such as Sociology and History as a whole. A study in Social Science Research Council, New York, revealed that nearly half of all articles in two leading Indian journals of sociology came from scholars abroad. In the case of History the proportion was almost one-third and more or less the same pattern was visible in the case of survey of books published by four leading social science publishers in south Asia (Parsuraman, 2005).

### **Social Science and History**

The notion of an autonomous social science though formed in the 18<sup>th</sup> century, crystallized only in the 19<sup>th</sup> century as a result of the contributions made by Auguste Comte and Karl Marx. Later, Durkheim along with the other 20<sup>th</sup> century sociologists made important contributions. Marxist theory was the first complete system of a general theory which has had considerable influence in serving as a basic framework in social sciences. Today, a singular social science notion has developed into a plural one because the complexity and diversity of social facts have become evident.

At any rate, it would be true to say that social sciences have not really concerned themselves with investigating the past of the civilizations albeit a great deal of reference is made to past phenomena and the philosophy of history. In the same way, historical studies have ignored sociological and anthropological implications of their data, even though there is a great deal of implicit discussion about the relationship and interaction between culture and society, such as whether culture is coincident with society (Malik, 1975).

This is undeniable fact that some historical works on early Indian history, notably by D.D. Kosambi, Romila Thapar and Burton Stein have grasped rich insights and formulations of anthropology, literary theory, mathematics and other disciplines of social science. D.D. Kosambi was the first historian who in

his rigorous and scientific study of Indian civilization showed the acumen of combining methods of various disciplines altogether. Kosambi's shift to society and culture in its entirety, both past and present, including within its ambit the elites and the marginal alike, was a redefinition of the scope of history and therefore redefinition of the sources of historical knowledge. Conventional sources would no longer suffice, and, in any case could no longer be studied in isolation. The shift had to be to 'combined method'; using what would today be called ethno-archaeology, anthropology, mythology, as well as fresh analyses of meaning of words in written records. It would be simplistic to attribute these shifts to a particular approach unless the actual working of the method can be demonstrated, and, it would seem that with Kosambi the actual work began by asking questions (Chattopadhyaya, 2002).

Endowed with a powerful and far-reaching imagination and an outstanding mathematical ability, Kosambi, who had concentrated his mind almost exclusively upon mathematical research up to 1939, gradually led to use his abstract methods for obtaining new results in various branches of social sciences. He began by applying statistical methods to Indian numismatics. He was seen weighing with the utmost precision and unremitting zeal thousands of punched-marked coins obtained from different museums in the country and thrashing out his data until he could establish their chronological sequence, forward convincing arguments regarding the economic conditions under which they could have been minted, and discover facts about the dynastic history of the pre- Mauryan period, based upon a wide study of the ancient literary sources and his new metrological findings (Sharma, 1974). Cultural anthropology has provided very rich tools of analysis in historical investigation. The recent work of Yuval Noah Harari is a case in point which illustrates how the three important revolutions (the cognitive revolution, the agricultural revolution and the scientific revolution) shaped the course of history (Harari, 2011).

Anthropological constructs and formulations have been used in study of early Indian society and ethnographic materials generated out of field work among various African and remotely inhabiting primitive communities strengthened the analytical rigour. But, R.N. Nandi who has exhausted almost two decades on Rigveda, warns in such words: In recent years there has been a marked tendency to

use anthropological constructs in the study of the Rigvedic society. In several instances the back projections of ethnic models have been attempted without a full view of the determinants of these models and without convincing documentation in support of these models. More importantly, the peoples on whom these models are structured inhabit disparate regions with characteristic limitations and opportunities. Besides a major constraint of this exercise is the absence of a dependable stratification of historical layers in the Rigveda which has a half millennium time spread and was composed by small nomadic groups widely separated by both time and territory (Nandi, 1987).

Another historian who in his penetrating work on Cholas questioned the assumptions underlying the established historiography on medieval South India and provides the basis for a broad new interpretation based upon a central concern with peasant society and culture. Burton Stein drawing liberally on the thousands of stone and metal inscriptions of the Cholas formulated the model of 'Segmentary State' borrowed from African Allur society studied by A. Southall (Stein, 1999). This anthropological model imposed on Cholas state has been refuted strongly.

### **Attacks on the Discipline of History**

The nature and the tenor of the recent attacks on the discipline of history is too debated an issue to deserve elaboration. Fukuyama's celebration of the end of history, the gradual unraveling of the hegemonic construct of Orientalism and the post-modernist's fractured perception of the past have increasingly undermined the idea that can present a true and objective account of the past. It is true that this genre of literature has had virtually no noticeable impact on the practice of history, but it is equally true that this has indubitably put under cloud the significance and legitimacy of what historians write, a fact that has concerned many of our fellow professionals. A characteristic articulation of this concern can be found in the encounter between David Harlan and A. Hollinger in the pages of *The American Historical Review* of 1989. Harlan using the works of Derrida and Lyotard, posits that history tells us nothing true and meaningful about the past. In a world dominated by global capitalism, the negation of history is virtually a denial of the reality of class struggle, a denial of the society's inbuilt potentiality to restructure itself and a legitimating for the continuance of the exploitative world order (Thakur, 2001). The

20<sup>th</sup> century was a bad time for history. It started with the churlish remark, made without explanation, by Henry Ford, 'History is bunk'. Francis Fukuyama spoke about 'The End of History' but he did not mean to give it the death sentence. He declared that liberal democracies survive the struggles forced on them by world history. They do so because competition and the freedom of ideas nurture the scientific method. This, in turn helps liberal democracies to improve technology, industrialize and compete successfully with other non-liberal laggards. In 2002, Fukuyama revised his opinion and declared 'there can be no end of history without an end of modern natural science and technology.

The last few decades of research along scientific lines have been breaking up of rigid frontiers of practically all disciplines. An era of multidisciplinary enquiries has been unleashed on an extensive scale. One talks not only of a close interaction amongst various branches of physical and natural sciences, or for that matter of humanities and social sciences; strong realization is also dawning to the effect that barriers between physical sciences and social sciences or between the latter and natural sciences must crumble. Simultaneously, there has also been a phenomenal spurt in the writings in different disciplines with a distinct focus on materialistic approach. As a result, voluminous literature has grown around Marxist methods and theories and their application to different branches of human learning. This is true of not only research monographs but basic research oriented writings in periodicals as well. The quest for knowledge and its material manifestation seems to be an infinite process (Shrimali, 1987). Keeping in view the above assertion some social scientists such as R.S. Sharma, K. Arvindakshaan, Deviprasad Chattopadhyaya, Narhari Kaviraj, Monis Raza, K. Seshadri decided to bring out *Social Science Probing* whose objective and scope was as follows: The journal seeks to explore different aspects of Indian polity, society, economy, history and culture within the Marxist framework..... In recent years Marxism has developed not only on the intrinsic strength of its methods and theories but has also gained from insights provided by the social sciences. This has increased its potential as a tool for the analysis of social science problems. People differ in their interpretations of Marxist methods and theories. They argue about the data on which these are based and the contexts to which these are applied, not to speak of the inferences that are drawn.

There are other journals too which address the issues and problems of social sciences. These journals moreover are oriented towards Marxist framework which continue to dominate the intellectual discourse of India till date. Initially, natural science became the focal point of all new knowledge but social sciences also developed in universities, though after a lag of about a century. Social sciences needed state patronage for growth and their protagonists sometimes eagerly courted natural sciences into universities because this ensured financial help from the powers that be. The five disciplines in social sciences that really went on to matter were history, economics, political science and anthropology. Geography, psychology and law also grew, like Oriental sciences or Orientalism, in the 19<sup>th</sup> century but they could not become the core of social sciences then. Till the 20<sup>th</sup> century, Anthropology and Oriental Studies could also not secure a place of pride within the social sciences. Anthropology began outside the university as a study of non-European people by explorers, travelers and colonial administrators who happened to be Europeans. Colonial anthropologists highlighted the difference between the Europeans and the others who were sometimes condescendingly also called 'peoples without history'.

Knowledge has many forms like science, arts and social sciences. History, the discipline specializing in understanding the past, itself is an enterprise of knowledge, like science or philosophy, also constitutes its subject matter (Yadav, 2012).

### **Role of Language in Social Science Research**

Language has always been a matter of prime concern in social science and in recent years has become an even more contested area. At one end of the spectrum is the school of thought that believes by precise definition and classification social science can build rigorous and useful models and theories about the world. At this end of the spectrum, there would tend to be a close identification of social science with natural science. At the other end of the spectrum are those who see language as infinitely flexible and precise meaning as forever unobtainable. Any attempt to 'capture' the world theoretically is doomed to failure. Language is important in another way. Words in themselves are merely artificial symbols, conventions established, usually within historical groups, as to how those symbols should be used. History has received valuable help from research in linguistics and its significance has not

been understood by many historians (Meenakshi, 1998).

All languages change and various factors are involved in such a change. Resemblances between the languages of Europe and Sanskrit had been noticed for a long time. Sir William Jones is considered to have initiated scientific comparison of these languages. The similarities between Sanskrit, Greek, Latin, and German and so on were so close and so striking that by comparing them; it was possible to gradually establish their common ancestor with a hypothetical reconstruction of their parent speech, in its phonology, morphology, syntax and vocabulary. The comparativists have been led to the conclusion that widely different languages spoken over large areas of Europe and Asia, ranging from Irish, in Western Europe to the languages of northern India, are closely related and descended from a common ancestor which they named as Indo-European.

It will be pertinent to mention that India's first science noble laureate Sir C. V. Raman during his tenure in Mysore university made it compulsory for the students researching under him in Physics to get diploma degree in German language since internationally recognized Physics journals at the time were mostly in German. Researcher must have a working knowledge of the language or script in which relevant sources are available. There are numerous stone inscriptions or copper charters found in abundance along length and width of India. Inscriptions of early India are in Prakrit, Sanskrit and later on in various regional languages-Tamil, Telugu, Kannada, etc. Early orientalists have the advantage of masterly command over oriental languages specially Sanskrit, Prakrit, Persian and Arabic. Sources of early Indian history are found in various languages-Prakrit, Sanskrit, Pali, Apbhransha and etc. For study of Buddhist literature Pali is essential as ancient scriptures of Buddhism are in Pali. The earliest known inscriptions belong to Ashoka who ruled in 3<sup>rd</sup> century B.C and were engraved in Prakrit language but in various scripts- Brahmi, Kharosthi, Armaik and Greek. The argument that there was no writing in India in the pre-Asokan period completely ignores the deep-rooted and long standing tradition of writing on perishable materials like palm leaf and Bhurjapatra. For working on Maurya period knowledge of Brahmi script is desired. A sincere and serious worker must be well acquainted with the script and language related to the sources.

Social science research in India continues to be done in colonial mind set. The colonial context of Indian sociology is still determining the academic practice of Indian sociologists to a great extent. They have not been able to shrug off a legacy of colonial division of labour in the realm of academics that deems it fit that the West provides theory and models and the East ( India ) furnishes the empirical data (Nadarajah, 1996). Equally true this assertion is in context of research pattern of Indian history. Text books on Indian history are replete with colonial epithets, concepts and models. It is proper time to decolonize the past in social science research and develop own perspectives and paradigms to understand Indian reality based on theoretical soundness, conceptual clarity, analytical rigour and methodological sophistication.

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## AIU Publication

on

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

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

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

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

# Research Paper Writing: Issues and Innovations<sup>#</sup>

M R Patil\*

Indian Education has grown leaps and bounds since independence and has broadened its objectives with a well-designed curriculum. It broadly aims to impart knowledge, develop skills, inculcate values and more importantly, build character and spirit of nation building which in turn promotes an all-round personality development of human beings. The Delors Commission (1996) Report had proposed an integrated vision of education based on two key concepts viz. Learning throughout life and the four pillars of learning 1) Learning to know: solid academic base; reading and numeracy; comprehension and ability to research and analyse 2) Learning to do: skills; capacity to act and ability to apply knowledge. 3) Learning to live together: communications; conflicts resolution; cultural sensitivity and multi-lingualism. 4) Learning to be: self-esteem; emotional intelligence; critical thinking and cultural awareness. These four pillars of education are recognised as the fundamental principles of reshaping the 21<sup>st</sup> century education. Today, it is highly recognised that the educational institutions need to develop employability skills in students through a classroom teaching-learning process and skill development has now become one of the major objectives of education. In order to accomplish this objective effectively, teachers and students have to enhance their reading habits and they have to be continuous learners. Great Educator and Philosopher, Dr. Rabindranath Tagore rightly said that “a teacher can never truly teach unless, he/she is still learning himself. A lamp can never light another lamp unless it continues to burn its own flame”.

Towards this end, writing and publishing a quality research paper is recognised as one of the best means to promote a continuous learning and sharing knowledge with others. Teaching, learning, research and publication are the core activities of teachers who are teaching across the different educational institutions right from primary to Postgraduate programmes. The teachers, irrespective of whether they teach in schools, high schools, higher secondary schools, colleges and postgraduate departments of universities need to be encouraged writing and publishing research papers on a different relevant socio-economic issues like food habits and their effects, how to develop good reading

habits, how to prepare for examinations, moral and human values, vocational education and its impact on beneficiaries, use of mobile phones and their impacts, career opportunities, school dropouts and their present status, rural employment schemes and their impact on beneficiaries and many more issues and problems. It is equally important to promote a research culture and spirit of enquiry among teachers and students. A quality research paper would certainly yield useful results, ultimately benefits the society. The success of any research paper writing lies more in the ability and innovation of the research scholar in terms of identifying a better and newer means and methods of carrying out research. It is stressed that a quality research paper is one that the findings of which are read, understood and appreciated by a common man. Against this background, an attempt has been made in this paper to discuss different relevant issues that have attributed to a declining quality of research paper and exploring innovative methods to enhance quality of research paper.

## Writing A Research Paper: Different Issues

### *Instant Writing and Publishing*

Writing a good research paper on any chosen topic certainly needs a sufficient time and it would be rather difficult to write a quality paper in a very short span of time. First and foremost, a writer has to be mentally prepared and has to make a frame of mind to write a paper. He/she has to sow a seed of thinking about writing a paper. A writer has to explore the subject, theme, sub-theme, focussed topic and the type of paper like a case-based, survey based, current issue based, data based and soon. Then, a writer has to be focused and start working on the chosen topic. Many times, we instantly decide to write a research paper because we receive a brochure from different educational institutions, inviting a research paper for the presentation at International/ National seminars/conferences/workshops. Further, a teacher gets motivated, because the organizers of seminars/ conferences assure that the same paper will be published in ISSN numbered / UGC listed journals. Sometimes, the idea of writing a research paper comes to mind suddenly as a part of fulfilling the requirement for the promotion to higher positions, or as a part of the requirement for the submission of doctoral thesis for the award of Ph.D. degree. In such cases, a writer is not prepared but a compulsion will force him / her to write a research paper at the last moment by any means

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because of a dead line. Under these circumstances, a research paper is prepared within a day or two just by collecting and compiling information from Google. In this process, the writer will not get any time to go through the paper and the same will be sent for seminar/conference or for publication in journals. As a result, this type of instant research papers will not yield any fruitful results.

### ***Insufficient Ground / Preliminary Work***

A sufficient ground work before taking up the task of writing and publishing a research paper is an essential pre-requisite to make a research paper more meaningful and useful one. If a teacher makes a reference of one or two select published papers in the good journals and periodicals and reading of two papers thoroughly right from the beginning till the conclusion and cited references, definitely he/she will get an idea about how a research paper is to be written how a relevant theme/sub theme be chosen, how the title for the proposed paper will be framed, how objectives are set and what research methods be used etc. In the process, he/she will get a frame of mind, better idea etc, towards writing a paper. Besides, reading of a newspaper, listening of relevant videos on different topics, writing and publishing a small article in newspaper or college magazine would also help too, in making outline a the research paper.

Carrying out a ground work is not restricted only to writing and publishing a research paper. But, it is found in every space of activity. For example, a student making a ground work of going through the previous year's question papers so as to have a better insight into the pattern of question paper and accordingly, he/she can outline an effective model question paper for their exams. No doubt, one can write a research paper without any ground work but it might not be upto the expectations and it would not result in any meaningful outcome. Writing a paper without sufficient ground work makes a lot of visible difference in terms of its worth, quality and utility. To write a good research paper, it requires at least not less than 2-3 months provided a writer spends some time regularly every day, because it is a continuous process and paper will not develop all of a sudden in one or two days time. A lot of reading and referencing of different resources and jotting down points of important information, putting across own experiences / ideas, outlining the paper, collecting facts and information, making a first draft, second draft and final paper needs to be finalised. Hence, it is always advisable that teachers/ writers need to make a lot of preliminary work so as to produce one good quality research paper.

### ***Liking and Involvement***

Liking and an involvement of a teacher in writing and publishing a research paper is another important key factor that contributes to a better quality of paper. A strong will power, thinking, concentration, company, hard work, patience and sacrifice are some of the qualities of a good writer. We, sometime say that we are interested but, we don't have a time because of a busy schedule, it could not be possible to write a paper. In this context, it is rightly said that 'Where there is a will there is a way', which means that if someone is determined to do something he / she will find a way to accomplish the undertaken task regardless of obstacles. If someone is not willing to learn, no one can help him/her. If someone is determined to learn, no one can stop him/her. Many times, we write a paper hurriedly without any likings, writing a paper just for the sake of writing. Involvement in writing a research paper means, anybody reads the research paper, the reader should feel the presence of the writer throughout the paper. The readers must enjoy reading of the paper which is integrated with several feelings, thoughts and intellectual expressions of a writer. There is a difference between 'hearing' and 'listening'. Involvement is like listening which requires concentration and understanding. Sometimes, a research paper is written without a writer being involved in the actual process of writing, just by compilation and dissemination of information/ facts/ figures. Lack of liking and involvement could be one of the reasons which will certainly deteriorate the quality of research paper

### ***Poor Planning and Execution***

'Well begun is half done' means beginning the task in the best manner so that one need not put in much more efforts to complete it. Planning is an intellectual process which lays down objectives and develops different ways and means to accomplish set objectives efficiently. It cannot assure cent per cent but, certainly minimises the percentage of uncertainty. It facilitates proper co-ordination among different components to achieve the desired results. Writing and publishing a research paper is no exception to proper planning and execution. Sometimes, an unplanned or not having any clear idea about writing a paper with regard to topic / theme, scope, location, target group of respondents, time duration, structure of research paper etc will lead to failure. For instance for the topic "Socio-Economic life pattern of migrant labour, the writer has to meticulously plan about the location/ place in which study be undertaken, type of labours, whether all types of labours or whether only tourism or construction labour or mining labour to be covered, total

number of labour respondents to be interviewed, types of questions to be used, how a labour respondents be contacted, outline of research paper and many others, so that a research paper can be written efficiently. This poor planning and execution is one such factor that would affect the quality and utility of a research paper

### **Poor Writing Skills**

A skill is an ability/talent which is acquired through a knowledge, practice and experience to carry out a task within the minimum time, energy and with an utmost perfection. Writing skills are the specific abilities of writing down the writer's thoughts/ ideas/ expressions into words in such a manner which makes their thoughts / ideas clearer and easily understandable to the readers. Writing skills are very important for both teachers and students. A good writer needs to have a different skills like converting a compound and complex sentences into a simple sentence, condensing a lengthy paragraphs into a smaller paragraphs without distorting the meaning and message; using synonyms / substitute words in place of idioms/ phrase/jargons, enhancing clarity and understanding ability to the readers; précising the text as much as possible and conveying as much as possible and ensuring a meaningful/ readable flow between the paragraphs. Besides, a good writer also needs to have a rich vocabulary, thorough knowledge of Basic English grammar, particularly formation of different tenses, the difference in usage of different tenses, simple prepositions, proper use of articles, punctuations, knowledge of proper spellings, and formulation of plural from singular and so on. A writer has to prefer to have his / her original writing / self-writing rather assembling from different sources. One can make a lot of references of different sources, but one has to construct his / her own write up which would certainly improve the quality of research paper.

Writing an abstract for the paper precisely and meaningfully covering all the aspects of full paper, formulating a clear, simple, precise and catchy title for the research paper, taking the reader along with the writer smoothly without any interruption, giving attention towards formatting the paper, making bold, capital, italic, spacing between the lines, font, etc. would further supplement the quality of research paper. Lack of all these writing skills would decline the quality and utility of research paper. For instance, writing an abstract of the paper is very important special skill, as writing the abstract in a few lines / half a paragraph representing the whole research paper and conveying to the reader quickly the summary of the research paper is more important. Writing an abstract also takes a time and needs concentration of the writer. In practice,

sometimes, we hardly apply our mind because of lack of time or lack of knowledge of writing an abstract. Because of poor writing skills, we just pick up one / two paragraphs from the introductory chapter and the same will be put as an abstract or else we take some paragraphs from the conclusion chapter and put it as an abstract of the paper. This type of an abstract hardly conveys anything to readers and an abstract would fail to take readers towards reading a full paper. Similarly, while writing the conclusion if the author reproduces some part from the analysis and discussion and put as conclusion it would not give a clear picture to the readers. Thus, in order to make the research paper more effective, the writer need to read relevant literature to develop better writing skills.

### **Writing A Research Paper: Innovative Ways**

#### ***Feasibility, Viability and Researchable Maturity***

Writing of a research paper begins with the selection of a topic for research. A writer, while choosing a research problem, has to assess the topic in terms of its feasibility, viability, researchable maturity, present relevance and an interdisciplinary nature. The research topic which fulfils these requisites would really lead to a good research paper. The term feasibility and viability are largely used in assessing a business proposal before it is being executed. It is equally important to test the topic for writing a paper. Sometimes, the chosen topic would be feasible in terms of its work ability and practicability but, the same topic would not be viable in terms of its continuity and availability of data and information. For instance, the topic like "Alcohol Consumption and its Socio Economic effects on Beneficiaries in a particular District" is considered to be feasible and relevant one as its findings would certainly benefit the society. This topic can easily be studied as it is confined to one district only. At the same time, this topic might not be viable as getting the respondents who consume alcohol for conducting a survey would be very difficult. Therefore, the writer has to examine the topic in terms of its feasibility and viability. Take another topic "Socio Economic Status of Women Entrepreneurs in India". This topic would be viable in terms of getting data and other information but, it might not be feasible because a writer would find it difficult to conduct a survey of women entrepreneurs all over India, considering his / her availability of time and resources. This topic would be viable but not feasible. Therefore, the writer can make this topic feasible by restricting the study to one district or some select district from one state.

Similarly, a writer also has to examine the topic in terms of its relevance to the present context and its

usefulness. For instance, if the writer selects in April 2020, the topic like “Sub-Prime Crisis and Its Impact on Bombay Stock Exchange” would not be relevant to the present context and it would not serve any purpose. At the same time, the topic like “Advancement of IT and its Impact on Interpersonal Communication” would obviously be relevant and useful to the society. The writer also has to assess the topic in terms of its researchable maturity. It means the level of growth and advancement of the topic. If the research problem has sufficiently grown and advanced then, it can be rightly chosen for paper writing. If the writer chooses the topic like COVID-19 (Corona Virus) and its impact on fruit and vegetable growers (farmers) in a district which looks to be highly relevant and researchable. But this topic would not have a researchable maturity because the writer would find it difficult to carry out this survey as it is not advanced and sufficiently grown up for conducting a research. Hence, the paper writer needs to consider all the essential requisites while choosing the topic for writing a research paper. So that he / she certainly makes a research paper more meaningful and useful one.

### ***Micro and An In-depth Research***

A micro and an in depth research needs to be encouraged. A small and an intensive study would be effective and the research output would be of very close to the realities and useful to the society. A structured questionnaire containing 4 parts of each, 25 questions and asking these 100 questions to chosen respondents would really become a tedious task for both the researcher and to the respondents. The survey will just become a monotonous and stereo type. In the process, the respondents will lose interest and become tired. As a result, the researcher will not get any good and factual result from the respondents. If the questionnaire is restricted to a few very relevant question the respondents will answer all the questions with the same interest and enthusiasm, as they used to have while answering the first question. Similarly, it would be always better to take a smaller simple size say 150 to 200 respondents to have an in-depth study to understand ground realities than administering a questionnaire to more than 2000 sample size respondents and getting a similar responses from all the 2000 respondents. Sample size should be representative and as per laid down norms.

As against this, a macro study covering so many research objectives would lead to a research output of less significance. It is rightly said that “Too many cooks spoil the Broth”. It means if too many people participate in a task, the task will not be done very well.

Similarly, the studies with too many objectives and too lengthy topics covering several research questions and objectives will not lead to useful research findings. For example, if the research paper writer takes the research topic like ‘Performance Evaluation of a Manufacturing Company’ and intends to study the different areas like cost performance, profitability performance, marketing performance, and managerial performance it would be difficult. Studying all these different functional Areas would not only very difficult but it would be very broad. In this case, none of the functional areas is concentrated fully and deeply by the researcher. He/ She will just touch upon each area and do not gain much. It is like “a jack of all trades and master of none”. Rather, it would be better to concentrate on any one of the functional areas, either cost performance or marketing performance so that an in-depth study could be carried out and a thorough knowledge would be gained in one area and the same can very well be used for necessary policy formulation.

Today, in order to have a better and useful research output, there is a genuine need to shift from a structured questionnaire based research to survey based research. Conducting a survey through the administration of a questionnaire to the respondents would not bring better results. Instead, if the researcher interacts and gains confidence from the respondents and then conducts a survey, the results would be more realistic and useful. For example, if the researcher wants to study ‘Customer perception and satisfaction in response to a Departmental Consumer Store’. In this case, there are two alternatives, 1) Conducting a field survey of customer respondents with the help of Five-Point Likert scaling questionnaire with 5 options like Strongly Agree, Agree, Neutral, Disagree and Strongly Disagree; 2) A researcher being physically present in the departmental store for a period of 15-30 days, making personal observation of customer behaviour in the store, an interaction between and among the customers, noting down every day the observation, and then coming out with a final research output. Between these two alternatives, the second alternative is more effective and would bring more realistic result close to the ground realities. Therefore, there is a need to take-up a micro level topic and carry out an in-depth study to write a quality research paper

### ***Researchable Objectives***

Research paper writing is a process which begins with identifying and selecting a research problem, raising relevant research questions, making proper assumptions based on prevailing knowledge and writer’s own experience and finally setting a research objectives

for the study. While setting research objectives, a researcher needs to exercise proper attention in terms of their potentialities and practicability. The set objectives should lead to understand something new through research. They should not be just for the sake of research objectives in research paper. Many times, a researcher / paper writer just sets objectives to increase the number irrespective of whether they lead to any research or not. The objectives which do not lead to any significant research output are named as non-researchable objectives. For example, if we take the topic i.e. "Job Satisfaction of a Degree College Teachers of a University" The objectives set for the study are: to study literature relating to job satisfaction, study the objectives, profile and number of colleges affiliated to the University and to recommend an administrative reforms and practices to enhance job satisfaction. These objectives in fact fail to address research issues i.e. study of job satisfaction of Degree College teachers of a University through a primary survey with a structured questionnaire or through an interactive research method with the select teacher respondents. These objectives are like beating around the bush, without addressing the real problem. Because, all the above said objectives address the literature pertaining to the chosen topic and the same will be included in the background to research problem. Further, recommending an administrative reforms and practices to enhance a job satisfaction might be a suggestion based on research findings. This also would not be considered as researchable objective. Hence, a research paper writer needs to take a proper care to set only researchable objectives so as to enhance the quality of research paper.

### ***Strong Methodological Approach***

The success of any research mainly depends upon two important components viz. setting relevant and researchable objectives and developing a scientific research methodology to accomplish the set research objective. A methodologically designed research can be considered as a piece of scientific research. The research output are judged and graded on the basis of research objectives and the methodology that is employed for the study. If the methodology is stronger and scientific, the research output would be equally strong and useful. Thus, the research methodology employed for the study plays a vital role in assuring a success of research study. Research Methodology simply, means the different methods that are employed to accomplish the set research objectives. The term methodology is broader than research methods and techniques. Methodology includes research methods and techniques but, research methods do not necessarily include methodology. It certainly goes beyond the

research methods and techniques. It asks the researcher to provide an appropriate justification / logic/reason behind choosing a particular research problem, target population, sample size, sampling method, type of questionnaire (open ended or close ended), respondent contact method, analytical tools and many others.

A paper writer has to describe in detail the methodology with necessary justification. Many times, in a research paper, methodology is not clearly defined and as a result, readers do not understand about how these objectives are achieved and the reliability of research findings would be obviously questioned. For instance, if the paper writer selects the topic "Assessment of Quality of Higher Education" then writer has to justify why he / she has chosen this topic and why not any other topic. This topic would be justified with a logical reasoning by supporting genuine issues that only 25-30 % of graduates who come from HEI, are employable; there is a wide gap between the skill learnt by the students in college / institutions and the skill set required by the industry. The question is raised that are these degrees truly able to judge the level of education and training received? (Kodati Viyyanna Rao, 2019). These interesting questions would certainly justify the topic chosen by the paper writer

Similarly, researcher needs to indicate clearly about the sampling by answering these questions viz. Who are to be surveyed? How many people to be surveyed? And how are these respondents chosen? Sometime, researcher mentions sample size say 400 respondents, but about how these 400 respondents are selected remains unexplained and unclear. For example, if a researcher selects the topic "Problems and Prospects of Coconut Pluckers. The sample size is 100 respondents and these respondents are drawn with the help of a snow-ball sampling technique. In this case, the researcher has to justify why he / she has used snow-ball sampling technique and why not convenience or judgement sampling methods. The use of snow-ball sampling method is justified in such a way that the sampling unit of coconut pluckers are rare population and they are not easily traceable. Thus, this referral / recommendation based sampling method is used. Accordingly, on the basis of initial respondent's recommendation, the second respondent will be selected for the survey. All the 100 respondents are contacted on referral basis. A scientific and logically justifiable methodology would truly make a research paper more effective and meaningful.

### ***Scientific Structure/Outline***

It is a general description or a plan showing the essential features of something. Writing a research paper

is no exception to the structure / outline. A research paper writer after having made a thorough ground work and having gained a comprehensive idea about writing a research paper, he / she had to devise a structure of a paper, indicating about different key components be included in the paper. A well planned structure prior to writing a research paper would definitely provide a right direction to the paper writer so that a writer would be on a right track. Accordingly, he/she can write a good quality paper. The structure of a paper would differ according to the nature and type of research paper. Conveniently, papers are classified into two types: 1) Scholarly paper / Technical paper 2) Conceptual / Self-Generated innovative idea based / experienced based paper. For a former, there is a standardized structure with a scope for minor modifications and for the latter, there is no any standardised structure and the structure is more of subjective in nature, but has a wide scope for innovation. The structure also changes as per the thinking / style/ thought of a paper writer.

Writing a self-generated idea based paper needs a special skill and is more of creative in nature. It needs a lot of intellectual deliberation within the writer. A structure / outline for both types of papers is as under. A standardised structure for a scholarly paper: title of a paper; an abstract; keywords; background to research problem; significance of research problem; statement of research problem/need for the study; literature review; research objectives; hypothesis; data and methodology; analysis and discussion; findings, conclusions and suggestions and select references.

A structure for conceptual/self-generated innovative idea based / self-experienced based paper is illustrated with the help of an example: title of the paper "Faculty Development: An Avenue to Quality Enhancement in Higher Education". The author of the paper would develop a structure as per his / her own creative thinking in the following way: Background; Faculty Development: Need; Faculty Development: Tools. 1) Continuous Self Learning: Best Avenue to knowledge revenue. 2) Successful students and teachers: An Interaction between Guru and Shishya. 3) Colleagues and Subordinates: means within. 4) Seminars and Workshops: Academic platforms. 5) Research and Consultancy: Inquiry into new knowledge and sharing it with Industry. 6) Academicians and Industry Executives: Reciprocity of conceptual and practical skills 7) Intra and Inter Institutional Academic collaborations: Strengthening Wisdom Base. 8) Internet and Websites: Global Source of IT Gift; Conclusion and References. A title for the research paper initially to be framed a tentative one which is subject to modification for an improvement. A proper and final title would be

framed after completing the writing of the paper so that an author will surely get a fair and complete idea to frame the most appropriate and catchy title. A well designed structure / outline of the paper would enable the writer to write a better research paper.

### ***Critical Analysis and Interpretation***

Analysis and Interpretation of a collected qualitative and/or quantitative data is another important step in research. Analysis is the process of splitting/dividing a huge data into a smaller groups based on the homogeneity and similarity in the behaviour of data and establishing a logical relationship between and among the classified data groups. The collected huge absolute data do not convey any meaning unless and until, they are related with another set of data. For example, the total number of computers available in the lab of a degree college, gives hardly any meaning unless they are related with another data variable i.e. the total number of students (Computer: student Ratio). This conveys some meaningful message to the readers. Comparably, the total net profit earned by a company in one financial year does not give any significant meaning, unless it is related with another variable i.e. total sales made for the corresponding year (profit to sales ratio).

Interpretation means explaining critically calculated statistical values / ratios with appropriate reasons so as to enable the reader to understand the research output. Many times, adequate analysis of the collected data is donebut, hardly any explanation is done of the different calculated values. If a proper and adequate explanation of results is not done, then it will limit the understanding of the research for the readers. Hence, both the analysis and interpretation are equally important in research. A paper writer needs to do a proper analysis and interpretation of collected data. Many times, it is observed in a research paper, more of tables, figures, graphs and diagrams and less explanation of these tables and figures. Further, too many tables, graphs and diagrams without explanation need to be avoided. The paper writer needs to explain in a simple word with simple sentences. The Paper writers have to focus more on analysis and interpretation of results to make are search paper more relevant.

### ***Simplicity, Clarity and Connectivity***

Simplicity, clarity and Connectivity are other most important requisites of a good research paper. One of the key objectives of writing a research paper is to share a new knowledge / information with people across different sections of the society. If the readers at large do not read and understand the content of the

paper, then the very purpose of writing a research paper is defeated. A writer needs to write a paper in such a way that readers at large understand and appreciate research paper. The writer needs to concentrate right from framing the title of the research paper till the conclusions and suggestions. The title of the research paper should be reader friendly and it should take readers to the content of the paper. The writer needs to ensure a proper linkage / connectivity among research issues, a research assumptions, research objectives and finally research findings. It means whatever research issues are raised and the same issues should be reflected in assumptions and the assumptions should be reflected in the objectives and finally the accomplishment of objectives should be seen in research findings.

For example, if the writer selects the topic as 'Reading Habits' of Students in Select High Schools in a Taluka, research issues raised are: what reading habits do students have? And do female students reading habits are more effective than reading habits of male students? The same issues are to be seen in research assumptions as there is no significant difference in reading habits among students and there is a difference in the reading habits between male and female students. In the same line, the assumptions should be seen in the objectives. It might not happen that chosen research problem is one and the objectives set are different and the findings are altogether different. Thus, ensuring a proper linkage among all the components is very important to enhance the quality of research paper. It is also important to maintain a proper linkage between the paragraphs so as to ensure a smooth flow of information. The paper writer needs to focus on all these aspects while writing a research paper.

### ***Specific Conclusions and Practical Suggestions***

Conclusions and suggestions are the most significant parts of a research paper. Conclusions are the end product of the research which is carried out by the researcher for writing a paper. Suggestions are the fruitful/relevant solutions to the problem based on the research. Readers are more interested in knowing the research problem, research objectives, research methods and importantly, findings. The paper writer has to satisfy readers' expectations. Writing conclusions and making realistic suggestions needs a special attention. If these are not properly written, the whole research paper loses its importance. Hence, a paper writer has to ensure a specific conclusions and suggestions in the research paper. For example, if the scholar studies the research problem like "Current and passed out students progression of a degree college". For this research study, specific conclusions would indicate

the current students' performance in their tests, end-semester exams, grades, percentage of marks, grasping ability, reasoning ability, learning interest, consistency in their performance and their graphical progress from 12 std to F.Y., S.Y. and final a year degree programme. At the same time, conclusions about the progression of passed out students would indicate their progress in terms of how many have gone for higher studies?; how many have gone for govt and private jobs?; how many have started their own business? How many have gone abroad? How many are still to settle? Rather, indicating about the growth of students, enrolment, background and profile of students, parents profile, male and female students, reservation category, year-wise list of passed out student etc., definitely do not constitute as an appropriate conclusions of the research work.

In the same line, realistic and policy oriented suggestions need to be given. Suggestions should not be mere statements like a degree college has to initiate necessary measures to maintain a proper data about the progress of passed out students. Suggestions should be in the form of a road map about how to improve the data base of passed out students' progress. A paper writer has to give his / her own suggestions based on his / her research experience. They should be purely on the basis of research conclusions.

Suggestion should not be just for the sake of giving suggestions. General suggestions that are suggested elsewhere should not be added to the list of suggestions. While giving suggestions, emphasis should not be on number of suggestions, but on a quality and practicability. They should be very close to the realities. Suggestions should be self-written nicely and precisely on the basis of findings. In conclusions and suggestions, information like importance of the topic, background to the problem, objectives etc., should be avoided. This information is already provided in the background of the paper. As a result, its relevance gets diluted. Sometime, some part of result analysis and interpretation, are taken as it is as a conclusion which would hardly convey anything to the readers. The conclusions are just a gist of findings. There is a difference between findings and conclusions. Findings are little broader and conclusions are very specific. Findings are the abstract from the results analysis and discussion and conclusions are the specific abstract of findings.

### ***Writing, Revising and Rewriting***

Writing, revising and rewriting is a must to bring a quality to a research paper. A good research paper cannot be written in a day or two days. A research paper writer needs to have a good patience and concentration.

A data and information alone will not make a research paper. It really needs a lot of efforts of a paper writer to arrange and organize in a structured manner. That is what is known as writing, revising and re-writing. A research paper writer needs to follow few steps in this regard: Step 1: writing of a paper begins with thinking, rethinking, generating ideas / thoughts, revision of ideas and thoughts and writing down all these on a piece of paper. Step 2: arranging and constructing these unorganised ideas and thoughts in a simple sentences and paragraphs. Step 3: writing a fair draft in a chronological order with necessary modifications. Step 4: getting it typed and taking a print of a draft copy. Step 5: checking meticulously with the original written copy and do all necessary corrections like omissions, commissions, spill mistakes, grammatical errors and other mistakes. Sometime, we do correction of a paper on a computer itself without printing of a hard copy, but it would not be so convenient and corrections would not be cent per cent perfect as it would be difficult to connect current page with the previous page and with the next page. Hence, corrections preferably, need to be made in a hard copy which would definitely ensure fairness in correction. Step 6: Incorporate all the necessary corrections in a soft copy from a hard copy and make sure that all are properly incorporated. Steps 7: take a print of fair copy and make a research paper ready for publication. Today, paper writers do all these work on a computer itself without using a paper and pen. These are basic steps which one can learn about revising and rewriting of a research paper.

### ***Creativity and Value Addition***

The term ‘Creativity’ refers to origination of new ideas. A researcher, while conducting a survey, staying and interacting a few days with the respondents, gaining confidence and then, conducting a survey is an innovation. Creativity is the ability of a person to create, perform or think of something which has not been done before. Bringing a creativity and value addition to the research paper definitely makes the research paper a different one. Creativity is illustrated with an example that while assessing the performance of an educational, institution, we use indicators like student-teacher ratio; student-computer ratio; the number of students visited to the library on a particular day mentor-mentee ratio and number of research papers published per teacher and soon.

Suppose if we go beyond these indicators and take assessing indicators like how much visible benefits the students have gained from the teachers; how much computer skills the students have gained from the computer lab; how closely the mentors have understood

the students problems and helped the students and how much percentage of research output of a research paper is used and soon. Going beyond numerical ratios, assessing the performance with the qualitative achievements of the institutions would certainly be considered as original and unusual innovative ways of assessing the performance of educational institution.

The innovative ways like referencing of sources and self-writing, instead of taking paragraphs as it is; making a simple sentences with simple words, designing an original survey questionnaire with a relevant few questions instead of taking readily available questionnaire with necessary modification to his / her research problem; reviewing a research paper thoroughly between the lines and self-writing of a review, instead of taking the previously reviewed write up as it is; framing a simple and catchy title of research paper; providing a practical solution to the problem, etc would certainly supplement a value addition to the research paper.

### **Conclusion**

Writing a research paper is one of the important academic writings and writing a quality research paper is essential to enhance its utility and usefulness to readers, Research paper writing would obviously benefit teachers / writers in many ways like. Self-satisfaction and feel of enrichment; academic achievement; drafting and communication skills; convincing ability; widening knowledge base; command and confidence over the subject; spirit of inquiry; organising ability; critical thinking ability; discipline; originating new ideas; analytical mind; patience and many others. These skills and qualities can be well inculcated in students through class-room teaching learning process. The different issues and innovations discussed in this paper would surely enhance the quality of a research paper.

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# Resurgence of Sanskrit

Vir Singh\*

Hon'ble Prime Minister Shri Narendra Modi in 'Mann Ki Baat' made everyone talk about the re-emerging worldview of Sanskrit. The glory of the ancient 'knowledge-empire' of India was actually attributable to Sanskrit. Universal recognition of Indian scholarship and India's respect in the eyes of the global community is also connected somewhere with Sanskrit. Sanskrit is the Mother of the disciplines like Arithmetic, Algebra, Geometry, Geometry, Astronomy, Cosmology, Physics, Chemistry, Ayurveda, Philosophy, etc. Therefore, the revival of Sanskrit becomes the most sacred duty of India. If the Prime Minister has talked about the rise of the glory of Sanskrit, then it is also the responsibility of the government that an environment conducive to the development of Sanskrit is created by the formulation and implementation of a sound national policy. Resurgence of Sanskrit will be India's best gift to the world.

Development of languages is undoubtedly the greatest identity and greatest achievement of mankind. Without language, we would differ from other beings only morphologically. But language has made us unique and totally different from all the living animals of the earth. With the development of language, man became all-encompassing. Human civilizations went on evolving along with the development of their languages. In all the civilizations that flourished in the history following human evolution on the earth, the most distinctive identity of each has been its own language. Nourished by its own language, embellished with its language, and glorified by its own language, every civilization has left its footprints.

Language spells out cultural environment of a civilization. The quality and standards of the cultural environment are fixed with the development of the language the culture nourishes. The more powerful, flowing, rippling and sharp the language is through its creativity, the more the fragrance of culture will spread and the higher the flag of civilization will fly.

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There is a close relationship between language and geography. Language is actually a 'product' of an ecosystem. Evolution of a specific language, as they say, is determined by soil and climate. This is the reason why the languages vary according to geography. A language is not fundamentally related to religion, faith, caste, creed or groups. If so, then it is understood that geographical encroachment has taken place. Geographical encroachment is one of the most serious diseases of our contemporary world. The people belonging to a faith, who have adopted a language on the basis of their conversion betraying the geographical reality, are emerging as the pests of the natural language of their present geographical environment. With an "invasive" language perpetuating amid a geographical (national) language, the realities of the geographical environment are gradually dying out and threatening the national integrity and unity. This encroachment of foreign languages on the original cultures is visible from India to Central Asia. And at present the language of the invaders (or the hybrid language, i.e. the language of the extremists and the language created by mixing the local languages) is turning its adopters extremists and terrorists. The notorious examples are our two neighbors, Pakistan and Afghanistan, conspicuously known all over the world for their extremism and terrorism.

A culture is inextricably linked with its language and the language has a deep relationship with the culture it evolves in. The culture broods over its language, and the language enriches the culture, gives it new heights, instills self-respect in every nook and corner of it and sets high standards of pride for it. It is through language that a culture's glory flows on the waves of time. The language itself spreads the fragrance of its culture in the world and creates the resolve to create a new world.

If analysed from the viewpoint of amount and potential of its creativity, there has been no language in the world more influential than Sanskrit. In the history of human civilizations, Sanskrit language has created the best literature full of wisdom. There has been no parallel of Sanskrit in its creativity. The biggest irony of human civilizations is that Sanskrit is almost out of public use today.

Sound is a form of energy, and language is a rhythmic and meaning-giving sound. Thus, language is also a very meaningful and creative form of energy that molds human species as the controller of all the living species on the planet. Just as the effects of energy forms are different, in the same way the effects of languages have to be naturally different. For example, societies aware of the creative potential of Sanskrit language are teaching this ancient language in schools and universities. Sanskrit is being taught in Europe because the vibrations generated at the pronunciation of its words make the mind of the students more healthy, vibrant and creative. In Thailand and Australia, Sanskrit is considered essential for excellence in creativity. The utterance of Sanskrit words stimulates the nervous system, due to which there is a wonderful increase in the activity and creativity of the brain.

When Sanskrit *mantras* are recited in marriage ceremonies, *yagnas* and other cultural rituals, the mind encounters a strange and healing wave of language and a wonderful feeling, even if the meaning is not understood. Late Khushwant Singh, a well-known English journalist of his time, wrote in his article that he used to listen to Sanskrit news on Doordarshan, because it gave him a different kind of blissful feeling, when he did not even understand their meaning.

The culture that developed Sanskrit and itself enriched by Sanskrit is the best source for world peace and social development even in today's era. History is the witness of that since ancient to the present times that India never invaded the land of any other country, did not encroach on anyone else's territory, did not violate anyone's peace. Today, countries, societies and faiths immersed in terrorism, extremism, and expansionism are disturbing the peace of the world, shedding blood of innocent people and tarnishing the entire human

race. These are the countries, societies and faith-driven devils who have stayed away from the culture of Sanskrit and who have tried to trample the culture of Sanskrit. If those people were cultured with Sanskrit language, how much peace there would be in the world, how much development, and how high the standards of human civilizations would be, one would feel proud to imagine. If they had known the value of the creativity of Sanskrit and considered the creation of knowledge as a natural intellectual act of human development, then today there would be no terrorism in the world and the world would be filled with the joy of creativity.

The languages which are flourishing the most in today's era are those which are economic-oriented, which have a hold on the market. English is a prime example of this. Why did English become the leading language of the world? Because it dominates the world market. Sanskrit is knowledge-oriented, so it is losing its glitter in a money-hungry world. If Sanskrit is to be promoted, it will have to make a contract with the economy. For the scholars of Sanskrit, economic security has to be ensured. The scholars of Sanskrit will be creating a wonderful and most desirable knowledge, with which the path will be paved for the creation of a new peaceful and supremely creative world and a new age.

When the Jews had no nation, their Hebrew language was almost extinct. After the establishment of an Independent nation of Israel in 1948, Jews not only revived Hebrew, but also made it their national language. The world today admires how the Hebrew language is nourishing Jewish culture. With the complete development of Sanskrit language, India's dream of becoming a world guru will not only come true, the world will also move towards creating new paths for its overall development in an environment of peace, tranquility and stupendous human creativity. □

# Multidisciplinary Education with Technology Integration and Data Support: Right Recipe to Prepare Students for Future Uncertainties

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**Soumya Swaminathan, Chief Scientist, World Health Organization delivered the Convocation Address at the 55<sup>th</sup> Convocation of the Indian Statistical Institute, Kolkata on 27<sup>th</sup> January, 2021. She said, “Technology is a tool that should be used with and under the guidance of humans, in order to solve our problems, we have to use them smartly, we have to see where they help us. India has a long tradition of statistics and data. And we need to maintain that. We need to ensure that we educate people. That people who understand the details of a particular discipline are able to communicate that in a way. I said, there is need for building up scientific literacy and health literacy so that people do not have irrational beliefs, but rather focus on evidence based and data based communication and messaging. That is something that we, as, technical experts, need to make a conscious effort to do more of and to do it better, and to communicate in a language that people understand and appreciate. It’s a skill that can be built over a period of time.”**

**Excerpts**

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I would like to start by congratulating all the graduating students of the Indian Statistical Institute, for this year, those who are getting their degrees and going out to pursue their future careers. It’s a moment of great excitement for all of you, but also of some anxiety and trepidation, particularly as you’re stepping out at a time when there is a global pandemic, when there’s a lot of uncertainty out there. But I want to reassure you that along with challenges in life, usually there are opportunities and this is a time when young people like you can really face up to the challenges that are facing society today as a whole and think about how you can contribute, how you can use your skills to address problems. In fact, in my own life, I find that I have been happiest when I’ve had a problem that I need to work on and to resolve, which keeps me up at night, which keeps my brain active and thinking which makes me talk to people about it, work with colleagues with different people from different parts of society to help solve that problem. So in a way it stimulates you to do your best and to come out of difficult situation.

I would like to spend a little bit of time describing my own experience over the last year or so, at the WHO where I’ve been sitting in a sort of position which has an eagle’s eye view over what’s happening across the world. It has been a time of huge challenge. It’s been a time that’s been very humbling because of the lack of knowledge we had about this virus, when we started off early in January, 2020. The amazing scientific collaboration and cooperation that I’ve

seen globally, across the world in order to develop new tools and technologies and also learning from the successes and failures that we’ve seen around the world. So I’d like to touch on some of those aspects. But let me go back to January, 2020. We first heard on the 31<sup>st</sup> of December, 2019, that there was a cluster of atypical pneumonia cases- and of course, the WHO has through its emergency program, a very well designed mechanism for focal points in every country, which all report according to the International Health Regulations to WHO when there is some suspicious activity. In addition to that we also have ways of collecting data from non-governmental sources, from lay media, from press, which is then looked at by an artificial intelligence algorithm, that about 9 million of these alerts that come out every month and then out of that, there are a few 100 of them, which need to be further investigated, because they seem to be serious. So that’s something that goes on day in and day out. And the fourth of January last year was when the WHO first issued what we call the disease outbreak news to the world, warning people that there was this outbreak, that it looks serious, and that we will be working on it and providing more information. So that’s the day. That you know, focal points for International Health Regulations around the world. Every country has a focal point. We’re alerted, and ministries of health actually got into action and started following what was happening in Wuhan.

Now, at that time, we knew very little about this virus. But on the 10<sup>th</sup> of January, Chinese scientists

actually published the whole genome sequence. And it was clear that this was a virus that was very similar to the SARS COV I virus which caused the severe outbreak in 2003, which also spread around the world, but ultimately was controlled in a matter of eight months, with about 8000 people being infected and 800 lives being lost. This virus turns out to be quite different from the SARS one in that it's much more easily transmissible. People who don't have symptoms can transmit this virus, it tends to result in Super spreader events. So one individual in a particular setting can actually lead to a lot of infections. Research done in India, that was published a few months ago showed that 15% of infections were responsible for over 80% of secondary transmission. We're still trying to understand where and how and when this happens, but it's clear that not everyone is transmitting to others equally. We also know now that most transmission occurs within either households, or within settings, where people are spending a lot of time together, and especially if it's a closed environment. So we talk about the three C's: the close contact with people, the closed environment, and being in close proximity.

Now, all of that knowledge started coming up over time. So on the 14<sup>th</sup> of January, when we first put out the technical guidance documents on how countries must start acting to prevent what surveillance needs to be done, what are the things that need to be done in terms of taking care of patients, the infection prevention and control, all of that was done basing our guidance on other similar respiratory viruses and this is where the Science Division that I lead in WHO comes into the picture. We are responsible for quality assurance of all the normative guidance. WHO is a normative agency, we do standards, we do guidance, we do recommendations. And all of that needs to follow a process, which is standardized, which is responding to the end user needs. It's timely, it's relevant, it's based on the best available scientific data and evidence, it's quality assured through a review process, which is also standardized. We make sure that there are no conflicts of interest amongst the members who develop the guidelines, and involve the right stakeholders in the discussions. So there is a process which needs to be followed. And we ensure that that's done. We set up a Publication Review Committee, which would turn around within 48 hours, documents that were being produced, because

in an emergency, it has to be done quickly. But at the same time, we needed to ensure that it meets the standards of rigorous science-based advice. So this is a balancing act. Always on the one hand, you have to be as fast as possible. On the other hand, you have to ensure that your quality is not suffering.

The other major thing we did right in January was convening researchers, academics, as well as the private sector, working on new tools. The first diagnostic test was described on February, 12. This was the RT-PCR test. At that time, there was a huge shortage of reagents of diagnostics, there were a few companies that were responsible for most of the reagents. And, in fact, we had a situation where in the whole continent of Africa, there were only two labs that could do this test- in South Africa and Senegal. In India, there was only one lab, the National Institute of Virology. But very quickly, of course, this got scaled up in India. Today, I think there are over 2000 Labs both in the private and public sector that can do the RT-PCR. And I know that we do approximately a million tests a day in India. So that's been a huge expansion of capacity, as well as of manufacturing the reagents and kits that you need within the country. But there was during February, March, April global supply shortages and the supply chains had broken down. And that's when it was really very sad to see the huge number of infections and deaths that occurred among health care workers. Globally, 7% of all infections have occurred among health care workers. And in the beginning, when there was a shortage of personal protective equipment, we saw a number of deaths among nurses and doctors and other paramedical staff. And this continues because they get exposed a lot more than others. And so we continue to see deaths of health care providers. But over time the supply chains have improved.

So going back to the science, this global convening led to a research road map in February that we prepared, which identified the knowledge gaps, and laid out the research priorities and be divided into nine thematic areas. Starting from the origin of this virus, you know, which animal did it come from, most likely, we believe it came from a bat, because it has a very close similarity in the genetic sequence to some bat Corona viruses and bats have lots of Corona viruses. But how and when and where it jumped into humans, whether there was an intermediate animal or not---that is one whole area of work and as you

know, there's a team now in China that's investigating that. Then there was a team looking at transmission, at epidemiology, at infection prevention and control, at the development of diagnostics, therapeutics and vaccines, and also social and behavioral research--very, very important for public health programs. We often think, at least doctors tend to think in a biomedical way of an intervention, whether it's a drug or some other product, But very often it is not easy for the community to take it up, especially if it's a behavior change. You ask people to stop smoking- it's not just a question of providing them with the right knowledge or guidance. That often doesn't do the trick. What you have to do to bring about behavior change is much more complex. It requires a multidisciplinary approach. It requires an individualized approach, it requires messaging in different ways.

Around that time, we also coined the term infodemic, to describe the huge amount of information that is out there: credible and good information, but also a lot of misinformation-rumors and myths. And we see that continues to occur. All kinds of absolutely outrageous ideas linking the virus with 5G, linking the vaccine with chips being embedded in people and so on, just creating a lot of confusion and fear and anxiety. We were working on the science and the guidance, and so on, which public health experts can understand and implement. At the same time, we had a huge emphasis on communication to the lay public and to the media. The Director General, and several of us would have daily press conferences for the first three or four months. And following that, we now moved to a twice-weekly press conference schedule. And this is an opportunity for journalists from around the world to connect and ask questions and then learn about the latest. We do events on Facebook Live. Many of us are active on social media. So that's been a change from the past. We've been really trying to reach out to people. We have created a WhatsApp bot, which can answer questions in many different languages, including several Indian languages. We worked with the technology companies- with the social media companies- to ensure on the one hand, that misinformation was being removed from their websites, and on the other hand, to provide useful, credible and practical information for people.

So, that has been equally important, I think, in this response. For countries that have responded

better, there are certain characteristics and qualities. The first one, of course, is political will and leadership. And there, it's often said that countries that have been led by women leaders have done remarkably well. And, you know, quoting the example of New Zealand, of Finland, and a few other countries. But what is needed is really a leader who's willing to take on board scientific advice, given to him or her by the experts in the country, and have a science-based approach, have humility, have compassion, look at people's problems and understand what they need. It's very easy to tell people you have to go into a 14 days isolation or a 14 days quarantine. But what is not recognized is that it's not everyone who can do that easily. There are people for whom a daily wage is important, otherwise, they're not going to be able to feed their family. So it's only when governments recognize that and support people to go into isolation, taking care of the family, making sure they have food, making sure they have their essentials, ensuring that the environment you provide is conducive, it's pleasant, - that is the way to get cooperation. The point is: without engaging the community, without empowering them, without explaining, without getting their buy in, it's very hard for a massive public health program to be successful.

I think these are lessons that we learn from this pandemic, which we need to apply to other disease control programs. We have many public health priorities. Tuberculosis is something I've worked on all my life, we have a half million people who die of TB every year in India- a much higher death toll than we've had from COVID-19. Luckily, we've kept our mortality rates very low,- (despite the fact that we have lost 150,000 people)- relatively low compared to what some of the other countries have faced in terms of deaths per million population or even cases per million. We have huge public health problems like non-communicable diseases, including hypertension, diabetes, (all going up), mental health disorders. And we need to take the lessons from handling the pandemic, into those areas.

I think one major lesson that we've seen is that countries that have invested in public health and primary health care over a period of time, have succeeded. This doesn't happen overnight. There needs to be a sustained investment-in infrastructure, in human resources, in data systems, in digital health,

in supply chain, logistics, in continuous training, in the community engagement component, in regulatory systems, in building institutional strengths and capacities. All of this needs to be in place in order for the system to be able to really respond effectively when there's a sudden emergency. This is also what we call resilient health systems that should have the capacity to withstand the shock, and still be able to do a good job.

We did a survey in the summer looking at essential health services and how those were impacted. And it was quite dramatic, that 90% of countries that were surveyed, came back and said that their essential health services were disrupted in one way or another and the lower the income of the country, the more the impact. So 44% of lower middle income countries had severe or partial disruptions in at least 25 essential health services, including immunization, antenatal care, tuberculosis diagnosis and treatment, cancer treatment, essential surgery, blood transfusion services. All of those were affected.

What that results in is really a setback to other health needs of the population, people not getting diagnosis, not getting treatment in time, leading to definitely a negative health impact. And while many state governments really made efforts to try to fill that gap, it was for several months that- people were not able to get to health centers. Health centers were either closed or dealing only with COVID-19. For example, in tuberculosis, India normally has something like 2.2 million cases, being notified every year to the central government-to the TB control program. And this number has been going up because the private sector has been also notifying cases. You can see over the last few years, the notification for TB has been consistently going up. But this year it's shown a dramatic decline of over 50%. Hopefully this will recover at some point, but that's an example. Patients who had suspected cancer, couldn't get their diagnosis on time, and so on. So it's important for health systems to also look at how to maintain essential health services while dealing with an emergency.

And then of course, you have the non-health impact. And that is something as economists, as demographers and statisticians, you understand much better than I do.

- What's been the impact on livelihoods. The estimate is that a 100 million people just in India

alone could be pushed into poverty- a lot of jobs lost.

- Impact especially on girls and young women, because they've had to do more of caring at home for the children who have been out of school.
- In poor families, this may be the time that girls don't go back to school because they've been out of school now for several months. There's a higher chance of being trafficked and there are already reports of increase in trafficking of young women and girls, globally.
- The impact on children who have been out of school. 1.6 billion children were out of school, but many countries prioritized school education and got their children back in school, even while restrictions were placed on other activities.

In India, now, the schools are beginning slowly to open up but certainly the impact on children has been more than just missing out on classes. It's for a child's physical, mental and cognitive development, they need that environment and for many children, the midday meal and just being away from the family environment for some hours in a day is very, very important. We are going to see all that play out over the next couple of years. There will be a period of catching up to do. The projection is that there's been a massive setback in the Sustainable Development Goals. Not only in the SDG for health, but also on the other SDGs. We will have to think about a concerted effort to overcome that. And that's where I think innovation, young people play a role, because we've seen the enormous innovations that had already been occurring. Our ecosystem for innovation had been growing, but the pandemic forced an acceleration perhaps, and in some cases, a leap frogging. Take the example of digital alternative. We do everything now virtually. Normally, one would be thinking about my flying to Kolkata to deliver this lecture. And that would have made it quite difficult. And we would have had to negotiate a time and a date and so on, apart from adding to all the air miles of flying and to the global warming. So some aspects are good, I think we are more efficient now,- we get a lot done this way. Of course, meeting and personal interaction is a different feeling and one needs that as well, you can't only be always on Zoom, it's very different to have that personal interaction. So that needs to continue, for sure. But a lot of work can be done this way. A lot of health care

is now being delivered through telemedicine, Many parts of the country, which lacks specialist services, can use telemedicine and specialists who are sitting in cities, big hospitals, or district hospitals, to provide their services to people who are in rural communities, maybe with having a health worker in between as an intermediary and the eSanjeevani Clinics have been trying to do that in India. And I understand that they're going to scale that up massively. So there have been some experiments that have happened, which have enabled the leapfrogging and hopefully providing better quality health services. But at the same time, we have to remember that technology cannot solve all our problems.

Technology is a tool that should be used with and under the guidance of humans, in order to solve our problems, We have to use them smartly, We have to see where they help us. But ultimately, we have to keep the goal in mind, which is improving health outcomes of people.

The last point I'd like to make is that rigorous monitoring, evaluation and research are really important and critical. I think we need to learn how to be a learning system, We need to be constantly, not just experimenting with new ideas and innovations, but learning from them. Some will be successful, some will not be so successful. And we need to make sure that we are self-critical, that we look at the evidence and see how we can do things better and improve health. Again, I'm thinking about health, but the same applies to other programs as well. You take education. There's a huge need to improve education standards, in schools and colleges across the country. Think about ways of doing that, of mentoring other people. As young people, you can mentor people who are less fortunate, who have not had the exposure or the opportunities to have the kind of studies and

the teachers and the facilities and infrastructure that you've had. A lot of people do want to help. We need to find a way. This is where I feel very encouraged when I see a lot of social entrepreneurship happening everywhere and young people particularly with brilliant ideas on how you can actually crowd source and make things better, without necessarily having to invest a huge amount of money.

So I think the idea of data would appeal to all of you, as well as the need for decisions being data driven, being science driven, and evidence based. I think that also needs to extend to scientific literacy in the community. I think institutions like the Indian Statistical Institute, have a role here. It is a very well respected institution that has had many, many stalwarts and giants of statistics and demographics, working in India has a long tradition of statistics and data. And we need to maintain that. We need to ensure that we educate people. That people who understand the details of a particular discipline are able to communicate that in a way. I said, there is need for building up scientific literacy and health literacy so that people do not have irrational beliefs, but rather focus on evidence based and data based communication and messaging. That, is something that we, as, technical experts, need to make a conscious effort to do more of and to do it better, and to communicate in a language that people understand and appreciate. it's a skill that can be built over a period of time. I'd like to congratulate all the graduating students, I'd like to congratulate their parents who I'm sure are watching and are extremely proud of their sons and daughters. And I'd like to congratulate also Dr. Sanghamitra, the director, and others in the Indian Statistical Institute- the faculty, and staff, and wish you a very, very good convocation. Thank you so much for this opportunity to speak to you. Bye. □

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## CAMPUS NEWS

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### **International Workshop on Bridging Industry and Academia in Language Studies**

One-Week Virtual International Workshop on ‘Bridging Industry and Academia in Language Studies’ was organized by the Amity School of Languages under the aegis of Amity University, Jaipur, Rajasthan, recently. The event was conceptualized with the vision to make students of languages industry ready and aware of diverse avenues of career building in the field of languages. The experts from industry and from various organizations were invited that hire students of languages. The workshop was attended by faculty members, students and research scholars. The speakers spoke on various themes related to the event.

Professor Jonathan Lockhart, Distinguished Poet, Critic and Historian from Canada discussed on ‘Creative Writing versus Content Writing’. Prof. Lockhart referred to the classist like Socrates, Plato, Aristotle, Sydney, Shakespeare, etc. and emphasized on the Socratic concept of Know Thyself to be the pivot idea of significant writing.

Dr. Ajit Pathak, President, Public Relation Society of India, Cartoonist, Corporate Image Strategist, Former General Manager, Communication, Administration and Welfare CSR, in his special address talked about the ‘Values of Journalistic Writing’. Dr. Pathak via historical account of Prithviraj Chouhan described the extreme importance of language and expressed that a language is an exact reflection of an individual’s character, personality, values, and growth.

In the post lunch session of Day, Prof. G K Aseri, Provost, Dean Academics and Director, IQAC informed about IQAC and its role in placement. He exemplified that how good knowledge of foreign language is an important rubric for earning best industry jobs and the same is also the Unique Selling Proposition (USP) for many higher education organizations.

The role of University Placement cell was discussed by Mr. Vinod Tejvani who expressed the various indispensable important factors regarding for placements. Mr. Tejvani casted light on the role of Internships, Language Command Skill Evaluation and Talent Source Identification. He concluded that every student must focus on a Career rather than a Job.

Corporate Careers and French was the core theme discussed by Ms. Maryline Laidin and Mr. Jatinder Singh Attaché for Cooperation in French Language, French Institute in India. The talk showcased the significance of learning new languages in the contemporary era as being bilingual is a very common eligibility.

The Second Session was presided over by Ms. Saudamini Deo, Manager Campus France, Jaipur, and Mr. Rachit Dhawan, Manager, Campus France, Delhi, Haryana and Uttar Pradesh. The session dealt with many aspects of France including education, work, and job. The best practices adopted by French Govt. include mutual recognition of academic degrees in India and France, subsidized tuition fees, scholarships, internships, and jobs for Indian students in France.

Professor Sushant Mishra, Chairperson, Centre for French and Francophone Studies, Jawaharlal Nehru University, New Delhi speaking on ‘French Studies and French Govt Policies’ emphasized on the need of foreign languages by citing the examples of market orientation where MNCs look for the employees well verse in many languages.

The next session was handled by Professor Sanjay Arora, Central University of Rajasthan, Kishangarh spoke on ‘English Graduates and Advertising Sector: New Avenues in New Normal’ and discussed in minute details the eligibility criteria, financial gains scope in advertising sector.

Mr. Csaba Toth, Founder IQC Global, Entrepreneur, United Kingdom who put forth his ideas on ‘Cultural Competency in 21<sup>st</sup> Century with reference to Growth Mindset’. Mr. Toth expressed several key concepts on culture and mindsets of different people.

Ms. Dolon Gupta, Co-founder BCFAI and Former Global Head, Language Initiatives, TCS, in her session on ‘Business Story Telling’ highlighted the art and significance of storytelling in advertisements and industries.

In her Session, Dr. Rubby Chawla, Director Allen House, Kanpur spoke on ‘Written and Verbal Communication in English in the Digital Era’ described the core concepts of communication, behaviour skills and personality development. Summarizing the session

in various acronyms like Softener, Picture, And Goal, she encapsulated the role of soft skills and languages.

Ms. Mridula Ganguly Khanna, Former Jt. General Manager, RITES Ltd., in her discussion on 'Emerging Opportunities in Foreign Languages in View of New Normal' discussed the independence and interdependence of academia, industry and government which not only ameliorates each other but also provides new job avenues.

Prof V Ganeshan, Former Vice Chancellor, Central Institute of English and Foreign Languages, Hyderabad and Emeritus Professor of German, Atlanta, in his extensive talk on 'Multilingual Challenges in MNCs in the Globalized World Importance and Role of Foreign Language Skills' informed about various career opportunities for scholars well versed in languages.

Ms. Puneet Kaur, Project Director, Goethe Institute/Max Mueller Bhavan, New Delhi presented various aspects of Translation studies and careers in the translation field and specifically emphasized on the career prospects, both India and abroad for German language scholars.

Prof. Hemendra Chandalia, Janardan Rai Nagar Rajasthan Vidyapeeth (Deemed to be a University), Udaipur, Rajasthan, in his delivery on 'English Studies and Avenues in Indian Scenario' highlighted the existing and upcoming careers for English graduands and scholars with English proficiency.

Dr Yuktेशwar Kumar, FHEA and Course Director, MAIT/Chinese Stream, University of Bath, UK discussed the traditional and non-traditional career prospects in translation studies.

### **Conference on Dharma-Dhamma Traditions in Building the Post-COVID-19 World Order**

A three-day Conference on 'Dharma-Dhamma Traditions in Building the Post-COVID-19 World Order' is being organized by the India Foundation and Nalanda University, Rajgir, Bihar during November 07-09, 2021. The event will examine the ways and means by which Dharma-Dhamma traditions can play that vital role at this critical turning point in human existence. It aims to bring together religious, political and thought leaders from Dharma-Dhamma traditions to ponder over building a philosophical framework for the emerging new world order.

The unprecedented COVID-19 pandemic has not only adversely impacted the health of nations but has brought about a churning in the mindsets and lifestyles too. Given the deleterious effects of this disease in all aspects of life, it is now widely accepted that as mankind moves forward, a critical re-evaluation of both lifestyles and thinking is necessary in order to bring peace, health and balance back into the universe.

The old-world order based on economy, trade and defense, as the essential bonding factors between nations is giving way to a new one in the post-COVID-19 era. New agenda items of urgency like climate change and other environmental issues; healthcare, not as disease management but with an emphasis on healthy living; technologies like AI, robotics, big data and block chain that impact everyday human life directly and indirectly, and finally, the resultant impact on the human dignity and human rights of world citizens will dominate the global discourse in building that new world order. The need for science, technology and economy with a human face was never felt so intensely before by mankind.

The Dharma-Dhamma traditions of Hinduism and Buddhism, together with other religious persuasions of the East, have distinctly holistic and inclusive answers to the challenges of the emerging post-COVID-19 world order. The Dharma-Dhamma approach to environment, holistic healthcare, human-centric development and human dignity can act as a defining wisdom for mankind in its endeavor for survival and progress on the principles of peaceful coexistence, non-violence, truth, amity and respect for all other forms of life. In effect, the Dharma-Dhamma traditions can play a vital role in shaping both the individual lifestyles as well as the politics and governance for recovering and moving forward from the ravages of the pandemic, laying the foundation for a happier and healthier future where society and nature can coexist in a harmonious spirit. The Subthemes of the event are:

- Traditional Resources and Modern Crises.
- Dharma and Dhamma for the Post-COVID World.
- Climate Change and Eco-crises.
- Spiritualization of Science and Technology.
- Human Dignity, Rights and Duties.
- Value-oriented Education.
- Holistic Health Care.

- Social Harmony and Cosmic Peace.
- Governance for Human Centric Development.
- Dharmic Traditions in Corporate Social Responsibility (CSR).

For further details, contact Organising Secretary, Ms Lalitha Kumaramangalam, Director, India Foundation, New Delhi-110001, Phone No: 011-43012351, E-mail: [dharmadhamma@indiafoundation.in](mailto:dharmadhamma@indiafoundation.in). For updates, log on to: [www.indiafoundation.in](http://www.indiafoundation.in)

### **International Conference on Children and Childhood**

A two-day Online International Conference on 'Children and Childhood : Imaginaries in Indian and Other Asian Literature and Film' is being organized by the Department of English and Cultural Studies, CHRIST (Deemed to be University) during November 11-12, 2021. The event aims to give voice and visibility to the narratives for and about children from an Asian perspective, by understanding and questioning the representations within and outside the narratives. It further attempts to locate and problematize the matrices that polarise representations of children and childhoods, providing a pathway to engage with Indian and other Asian narratives for children and to radicalize the representation of children and childhoods in narrative imaginings and retellings.

In contemporary times, with a boom in digital media and other forms of convergent spaces and identities, narratives for and about children and childhood are often multilayered, diverse and complex; making it imperative to critically engage with them from a more specific and contextual perspective. In other words, multiple childhoods require multiple narratives for and about children that cover different contexts. However, ever since the inception of childhood studies and children's literature studies within academia, there has been a dominant imagination and theorization of the 'child' and 'childhoods' from western and European lenses, despite the notion of the 'child' and 'childhood' in itself has transformed in practice, imaginings and theorizations across ages and spaces, the field of children's narrative within media in general, and literature and film in particular.

The scope and understanding of children's narratives within India and other Asian contexts still remains underrepresented within academic scholarship to a great extent. Considering the multiplicity and contexts of childhoods across cultures, it is imperative that a nuanced and theoretical engagement be initiated in

the milieu of non-western or non-European intellectual, educational and creative practices. Above all, it is important and necessary to provide opportunities for multiple engagements and conversations about children and childhoods across narratives. The Themes of the event are :

- Disability.
- Environment.
- Writing for Children.
- Morals vs Neutral Narratives.
- Ideology and Politics in Children's Narratives.
- Visual Politics in Children's Narratives.
- The Child in Children's Narratives.
- The Adult in Children's Narratives.
- Gender in Children's Narratives.
- Narrativising the Child.
- Narrativising Morality.
- Narrativising the Self.
- Memoirs by Children and for Children.
- Comics for Children.
- Anime.
- Historicizing Children's Narratives in Specific Asian Contexts.

For further details, contact Conveners:

- Ms Renu Elizabeth, Assistant Professor, Department of English and Cultural Studies, CHRIST (Deemed-to-be University) Bangalore-560029 (Karnataka). E-mail: [renu.elizabeth@christuniversity.in](mailto:renu.elizabeth@christuniversity.in)
- Dr. Sonia Ghalian, Assistant Professor, Department of English and Cultural Studies, CHRIST (Deemed-to-be University) Bangalore-560029 (Karnataka). E-mail: [sonia.ghalian@christuniversity.in](mailto:sonia.ghalian@christuniversity.in)

For updates, log on to: [www.christuniversity.in](http://www.christuniversity.in)

### **International Conference on Multidisciplinary Innovation in Academic Research**

A two-day International Conference on 'Multidisciplinary Innovation in Academic Research' is being organized by the Institute for Engineering Research and Publication (IFERP), Bangalore (Karnataka) during November 25-26, 2021 at Chennai. The Faculty Members, Research Scholars, MBA/M. Sc. Students, Educators, Industry Professionals (CEOs, CMOs, Vice Presidents, Directors, GMs), Practitioners (Brand Specialists, Head of

Marketing), Delegates, Stakeholders, Editorial Board Members of Journals, Innovators, Government Officials, Technology Experts, etc. may participate in the event. The event aims to be an excellent setting to discuss the current progress in Engineering Technology and Management related fields, the development based upon new concepts, and the advances in modern Engineering and Management. It provides a platform to the scholars, scientists, engineers and students from universities and industries all over the world to present the ongoing research activities, and hence, to foster further research relationships between universities and industries. The various Sessions/Tracks of the event are:

### ***Applied Sciences***

- Applied Physics.
- Applied Mathematics
- Architectural Science.
- General Engineering.
- Computer Science.
- Computer Engineering.
- Communication Studies.
- Applied Physics & Electronics.
- Science and Mechanics.
- Electronics Science.
- Sound Technology.
- Systems Engineering.

### ***Engineering and Technology***

- Industrial Engineering.
- Information Management.
- Integrated Electronics Engineering.
- Information Systems.
- Engineering and Mechanical Science.
- Engineering Management.
- Ecological Engineering.
- Geological Engineering.
- Mechatronics Engineering.
- Mining Engineering.
- Nanotechnology Engineering.
- Technology Management.
- Manufacturing Engineering.
- Mechanical Engineering.
- Electrical Engineering.
- Aeronautical Engineering.

### ***Business Management and Studies***

- Managing Technology and Sustained Innovation.
- Resource Management and Sustainable Development.
- Social Entrepreneurship.
- Corporate Ethics, Responsibility, and Liability.
- Accounting and Finance.
- Advertising.
- Business Development.
- Business Planning Guides.
- Company Composition.
- Customer Service.
- E-Commerce.
- Employment Management.
- Energy Topics.
- Financial Management.
- Inventory Control.
- Insurance.
- Legal Concerns.
- Marketing.
- Market Research.
- Merchandising.

### ***Education and Technology***

- Edtech Policy Development.
- Computational Thinking.
- Edtech Ecosystems.
- Edtech Agencies.
- Distribution and Organization of Digital Media.
- Professional Learning.
- AR, VR and Mixed Reality.
- Artificial Intelligence.
- Global Learning.
- Learning Profiles.
- Learning Sciences.
- Digital Citizenship.
- Student-centric Online learning.

For further details, Contact Organising Secretary, Institute for Engineering Research and Publication, Fourth floor, Indiquebe South Island RK Colony, 2<sup>nd</sup> Phase, JP Nagar, Bengaluru-560041(Karnataka), Mobile No : 091501 56932, E-mail: [info@icmiar.net](mailto:info@icmiar.net). For updates, log on to: [www.iferp.in/events/](http://www.iferp.in/events/)



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# THESES OF THE MONTH

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## SCIENCE & TECHNOLOGY

### A List of doctoral theses accepted by Indian Universities (Notifications received in AIU during the month of July-August, 2021)

#### AGRICULTURAL & VETERINARY SCIENCES

##### Agricultural Engineering

1. Sandeep Kumar. **Functional expression of  $\alpha$ -glucosidase towards production of isomaltooligosaccharides.** (Dr. MVRK Sarma), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

##### Agronomy

1. Tanwar, Radhika. **Consequences of climate change on agriculture and animal husbandary enterprise owners of South Gujarat Region.** (Dr. R D Pandya), Department of Agronomy, Navsari Agricultural University, Navsari.

##### Crop Physiology

1. Patel, Aditi Devendrakumar. **Genetic analysis for seed cotton yield and its attributing traits in Desi cotton.** (Dr. K V Vadodariya), Department of Crop Physiology, Navsari Agricultural University, Navsari.

##### Veterinary Science

1. Desai, Dhruv Nitinkumar. **Development of Polymerase Spiral Reaction (PSR) technique for rapid visual detection of microorganism.** (Dr. I H Kalyani), Department of Veterinary Microbiology, Navsari Agricultural University, Navsari.

#### BIOLOGICAL SCIENCES

##### Biotechnology

1. Sarsar, Mayuri Shripadrao. **Exploration of unhala hot water spring (Rajapur) for isolation of industrially important thermostable enzyme producers.** (Dr. A P Pathak), Department of Biotechnology, Swami Ramanand Teerth Marathwada University, Nanded.

##### Botany

1. Choudhri, Smita Rahul. **To study the effect of different soil depth and leaf nutrient status in relation to yield and physiological fruit quality of sweet orange of Jalna District of Maharashtra.** (Dr. A B Gawate), Department of Botany, Swami Ramanand Teerth Marathwada University, Nanded.

2. Patel, Ekta Prahlabdbhai. **Evaluation of *Zinnia elegans* L for phytoremediation of the soils Contaminated with cadmium (Cd) and lead (Pb).** (Dr. N R Modi), Department of Botany, Gujarat University, Ahmedabad.

3. Sarkar, Baishakhi. **Studies on pollen morphology of arboreal spermatophytes from Terai and Dooars of West Bengal, India.** (Prof. A P Das and Prof. Suber Bera), Department of Botany, University of North Bengal, Darjeeling.

##### Life Science

1. Agarwal, Neha. **Role of NPR1 in global nucleosomal remodeling in *Arabidopsis thaliana*.** (Dr. Samir V Sawant), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

2. Badola, Poorwa Kamal. **Molecular components involved in miR858-dependent plant growth and development.** (Dr. P.K. Trivedi), Department of Life Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

3. Dileep, S A. **A molecular understanding of human sucrase enzyme with sugarcane sucrase inhibitor.** (Dr. Dandamudi Usharani), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

4. Ganguli, Piyali. **Identification of immunoregulatory modules and optimal treatment strategies for eliciting effector functions against different diseases.** (Dr. Ram Rup Sarkar), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

5. Ghosh, Samrat. **Analyzing big data with novel combinatorial approach.** (Dr. Sucheta Tripathy), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

6. Kannan, B N. **Elucidation of mitochondrial sub-compartment specific stress response during proteotoxic stress of yeast, *Saccharomyces cerevisiae*.** (Dr. Souvik Maiti), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

7. Maritim, Tony Kipkdech. **Genomic Studies for molecular dissection and genetic improvement of quality characteristics in tea (*Camellia sinensis* (L.) O. Kuntze).** (Dr. R.K. Sharma), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

8. Patil, Gajanan. **Structural and functional characterization of fatty acyl-AMP ligase from diverse organisms.** (Dr. Rajan Sankaranarayanan), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

9. Praveena, Ganji. **Biosynthesis and biochemical properties of silver nanoparticles by isolated *Streptomyces* sp. - core protein characterization and green application.** (Dr. R.S. Prakasham), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

10. Rai, Upasana. **Structural-functional insights of DRB2 during RNA recognition in *A. thaliana*.** (Dr. Mandar V Deshmukh), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

11. Ranjithkumar, A. **Production and characterization of proteases and their applications.** (Dr. C Muralidharan), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

12. Rathore, Rajeshwari. **Elucidation of the role of glycosylated albumin as a potential marker in prediabetes and development of insulin resistance.** (Dr. Mahesh J. Kulkarni), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

13. Shivhare, Radha. **Transcript profiling of pearl millet (*Pennisetum glaucum* L.) under drought stress and functional characterization of a stress-responsive gene.** (Dr. Charu Lata), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

14. Umesh Kumar. **Development and characterization of TILLING population of *Gossypium herbaceum* L.** (Dr. Hemant Yadav), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

15. Yadav, Manish Kumar. **Functional characterization and application of metagenome-derived esterases for enantioselective biotransformations.** (Dr. Rakesh Sharma), Faculty of Biological Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

## Microbiology

1. Shaheen, Md Zaker Uzma. **Characterization of biosurfactant of bacillus sp and its application as antibiofilm agent.** (Dr. H J Bhosale), Department of Microbiology, Swami Ramanand Teerth Marathwada University, Nanded.

## Zoology

1. Bansode, Manisha Uttamrao. **Effect of some medicinal plant extracts on pathogens of fresh water fish *Cyprinus carpio* (Linnaeus, 1758).** (Dr. N R Jaiswal), Department of Zoology, Swami Ramanand Teerth Marathwada University, Nanded.

2. Lalrawngbawli, Annie. **Role of visfatin in reproductive organs of female mice.** (Dr. Vikas Kumar Roy), Department of Zoology, Mizoram University, Aizawl.

3. Lyngdoh, Salvador. **Spatial ecology and predation pattern of wolf in Spiti Valley, Himachal Pradesh India.** (Dr. Bilal Habib), Department of Wild Life Science, Saurashtra University, Rajkot.

## EARTH SYSTEM SCIENCES

### Environmental Science

1. Neha. **Treatment of synthetic pharmaceutical wastewater containing anticonvulsant (GABAPENTIN) and lipid regulating (GEMFIBROZIL) drugs by microbiological process.** (Prof. Alok Sinha and Prof. Vipin Kumar), Department of Environmental Science and Engineering, Indian Institute of Technology, Dhanbad.

2. Prabhakar, Roshan. **Assessment of the performance of nano alumina and its composite based adsorbents for arsenic removal from groundwater.** (Prof. S. R. Samadder), Department of Environmental Science and Engineering, Indian Institute of Technology, Dhanbad.

3. Preeti Kumari. **Assessment of pollution load in lentic and lotic habitats and their interconnecting canal with emphasis on metal (LOID), macro-invertebrates and fish in an industrial city (Jamshedpur, India).** (Prof. Subodh Kumar Maiti), Department of Environmental Science and Engineering, Indian Institute of Technology Delhi, New Delhi.

4. Saha, Amal Krishna. **Application of modified nano Zero-Valent Iron (nZVI) for dehalogenation of endosulfan.** (Prof. Alok Sinha), Department of Environmental Science and Engineering, Indian Institute of Technology, Dhanbad.

5. Vanlalliantluanga, Albert. **Impact of solid waste disposal on soil characteristics in Kolasib Town Mizoram.** (Prof. B P Mishra), Department of Environmental Science, Mizoram University, Aizawl.

## ENGINEERING SCIENCES

### Aerospace Engineering

1. Sandeep Kumar. **Stochastic response and reliability analysis of aeroelastic structures.** (Dr. Amit Kumar Onkar), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### Chemical Engineering

1. Dey, Runa. **Postcombustion carbon dioxide capture using functionalized mesoporous materials.** (Prof. Arunkumar Samanta), Department of Chemical Engineering, Indian Institute of Technology, Dhanbad.

2. Pawar, Aiswarya B. **Structural characterization of key players in the ErbB signaling pathways: Implications in cancer.** (Dr. Durba Sengupta), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

3. Saggi, Gurpreet Singh. **Source apportionment studies to identify particulate matter from crop residue burning affective human health.** (Dr. Susheel Mittal), Department of Chemical Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Satwaji, Sable Sunil. **Development of degradable polypropylene using organic additives.** (Dr. Haripada Bhunia and Dr. Sanjeev Kumar Ahuja), Department of Chemical Engineering, Thapar Institute of Engineering and Technology, Patiala.

### Civil Engineering

1. Sharma, Devender. **Accelerated carbonation curing as a CO<sub>2</sub> sequestration and water conservation technique.** (Dr. Shweta Goyal), Department of Civil Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Shinde, Atul Sukhadevrao. **Study of constructed wetland configurations for wastewater treatment.** (Dr. M L Waikar), Department of Civil Engineering, Swami Ramanand Teerth Marathwada University, Nanded.

### Computer Science & Engineering

1. Amanpreet Singh. **Detection framework for content-based cybercrime in online social networks.** (Dr. Maninder Kaur), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

2. Bhoji, Smita Ashokrao. **Implementation and development of soft computing methods and their performance analysis for hand written Devanagari characters recognition.** (Dr. Manu Pratap Singh Dr. Sudhir B Jagtap), Department of Computer Science, Swami Ramanand Teerth Marathwada University, Nanded.

3. Maurya, Swati R. **Performance analysis of reconstruction and 3D visualization methods for geo-spatial objects.** (Dr. Ganesh M Magar), Department of Computer Science, S.N.D.T. Women's University, Mumbai.

4. Pankaj Kumar. **Enhancing security and privacy for robust IoT network.** (Dr. Lokesh Chouhan), Department of Computer Science & Engineering, National Institute of Technology, Hamirpur.

5. Singh, Muskaan. **Cloud-based Sanskrit to Hindi machine translation system.** (Dr. Inderveer Chana and Dr. Ravinder Kumar), Department of Computer Science & Engineering, Thapar Institute of Engineering and Technology, Patiala.

6. Walse, Rajesh Sudhakar. **Design and development of novel techniques for clustering and classification of data.** (Dr. G D Kurundkar), Department of Computer Science, Swami Ramanand Teerth Marathwada University, Nanded.

### Electrical & Electronics Engineering

1. Rawat, Harish Singh. **The study of Electromagnetically Induced Transparency (EIT) for its potential applications in e-field sensing.** (Dr. Satya Kesh Dubey), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### Electrical Instrumentation Engineering

1. Verma, Anurag. **Design of energy management system for smart home.** (Dr. Surya Prakash and Dr. Anuj Kumar), Department of Electrical and Instrumentation Engineering, Thapar Institute of Engineering and Technology, Patiala.

### Electronics & Communication Engineering

1. Janish. **Design and implementation of novel algorithm for energy efficient cluster handling in real time wireless sensor network.** (Dr. Kapil Gupta), Department of Electronics & Communication Engineering, Maharishi Markandeshwar University, Ambala.

2. Kanwarpreet Kaur. **Performance analysis of fractional derivative in image processing applications.** (Dr. Kulbir Singh and Dr. Neeru Jindal), Department

of Electronics & Communication Engineering, Thapar Institute of Engineering and Technology, Patiala.

### **Environmental Science and Engineering**

1. Hajare, Rajashree. **Quantification of pathogens and indicators for evaluation of human health impacts using Quantitative Microbial Risk Assessment (QMRA) approach for safe use of reclaimed water.** (Dr. Pranav Nagarnaik), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### **Food Science & Technology**

1. Sonkar, Nitin. **Drying of Amla (Phyllanthus emblica) grating for value addition.** (Dr. K. Venkatesh Murthy), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### **Instrumentation & Communication Engineering**

1. Kalra, Manish. **Analysis of time-frequency techniques for moving ground vehicle detection and classification using seismic signal processing.** (Dr. Bhargab Das), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

2. Singhal, Gaurav. **Spatio temporal mapping using drone to model chlorophyll concentration for crop health monitoring.** (Dr. Babankumar Bansod), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

3. Thakur, Anupma. **Development of efficient photoelectrodes for solar driven hydrogen production by water splitting.** (Dr. R.K. Sinha), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### **Mechanical Engineering**

1. Anjaneyulu, B. **Optimization of process parameters using Taguchi and neural networks in micro air jet machining of FRC (Fibre Reinforced Ceramics) composites.** (Dr. G. Nagamalleswara Rao and Dr. K. Prahlada Rao), Department of Mechanical Engineering, Jawaharlal Nehru Technological University Anantapur, Ananthapuramu.

2. Malwad, Shivaji Dnyaneshwar. **Performance evaluation and integration of solar thermal systems.** (Dr. V B Tungikar), Department of Mechanical Engineering, Swami Ramanand Teerth Marathwada University, Nanded.

3. Paswan, Sunil Kumar. **Investigations of a rotational magnetorheological honing process for improved productivity of nano-finished internal surface of cylindrical workpieces.** (Dr. Anant Kumar

Singh), Department of Mechanical Engineering, Thapar Institute of Engineering and Technology, Patiala.

4. Sharma, Pankaj. **Analysis of weld joint of weldable magnesium alloy (AZ31B) using Metal Inert Gas Welding (MIG).** (Prof. Somnath Chattopadhyaya and Prof. N. K. Singh), Department of Mechanical Engineering, Indian Institute of Technology, Dhanbad.

### **Metallurgical Engineering**

1. Mandal, Ajay. **Graphene reinforced stainless steel metal matrix composite through additive manufacturing.** (Dr. N. Sathish), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

### **Pavement Engineering**

1. Khan, Shahbaz. **Performance evaluation of inverted pavement for low volume roads.** (Dr. M.N. Nagabhushana), Faculty of Engineering Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

## **MATHEMATICAL SCIENCES**

### **Mathematics**

1. Baroi, Juhi. **Transference characteristics of polarized shear waves, love-type waves and bleustein-gulyaev waves in elastic composite structures involving piezoelectric or peizomagnetic materials.** (Prof. Sanjeev Anand Sahu), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

2. Rajdip Kaur. **Mathematical modelling on sources of water causes cancer from Himachal Pradesh to Rajasthan via Punjab.** (Dr. Ashwini Nagpal), Department of Mathematics, Tanta University, Sri Ganganagar.

3. Sarkar, Koushik. **Topology of different metrics spaces and fixed point theories.** (Prof. Manoranjan Singha), Department of Mathematics, University of North Bengal, Darjeeling.

4. Suryawanshi, Dnyanoba Maroti. **Study of nonlinear differential equations through iteration method.** (Dr. S S Bellale), Department of Mathematics, Swami Ramanand Teerth Marathwada University, Nanded.

5. Verma, Sandeep Kumar. **Characterization of zero-order mehlher-fock transform and its allied operators.** (Prof. Akhilesh Prasad), Department of Mathematics and Computing, Indian Institute of Technology, Dhanbad.

## Statistics

1. Patel, Jitenkumar Bharatbhai. **Some studies on inventory models for deteriorating items under supply chain for decision making.** (Dr. R D Patel), Department of Statistics, Veer Narmad South Gujarat University, Surat.

## MEDICAL SCIENCES

### Ayurveda

1. Mahesh, S. **Preclinical safety study of Vatavidhvamsana Rasa.** (Prof. B J Patgiri), Department of Ayurved, Gujarat Ayurved University, Jamnagar.

2. Parsottambhai, Taviad Krushnkumar. **Pharmaceutical development of Trinshati and Shashti Puti Naga Bhsma and their comparative clinical efficacy in the management of Madhumeha (Type-2 diabetes).** (Prof. B J Patgiri), Department of Ayurved, Gujarat Ayurved University, Jamnagar.

### Biotechnology

1. Rani, Pallapati Anusha. **Effect of glycerol 3-phosphate dehydrogenase 1 on the cellular stress response pathway.** (Dr. Ipsita Roy), Department of Biotechnology, National Institute of Mental Health & Neuro Sciences, Bengaluru.

### Homoeopathy

1. Singh, Poonam. **Role of homoeopathy in primary dysmenorrhoea: A randomized placebo control trial.** (Dr. Namita Chatterjee), Department of Homoeopathic, Tantia University, Sri Ganganagar.

2. Singh, Pranesh Kumar. **Efficacy of gymnema sylvestre and syzygium jambolanum in case of type II diabetes mellitus: A randomized comparative trial.** (Dr. Anil Kumar Vangani), Department of Homoeopathic, Tantia University, Sri Ganganagar.

### Medicine

1. Prem Lata. **Role of T regulatory (Treg) cells and T-helper 1 and T helper 2 (Th1 and Th2) cytokines in experimentally induced mice model of malaria in pregnancy.** Department of Internal Medicine, Postgraduate Institute of Medical Education and Research, Chandigarh.

### Microbiology

1. Nikhil Payal. **Identification of Candida species from various clinical samples by conventional methods, Chrom Agar and MalDI-ToF.** (Dr. Nikhil Payal), Department of Medical Microbiology, Shree Guru Gobind Singh Tricentenary University, Gurugram.

## Nursing

1. Amandeep Kaur. **A study to assess the knowledge on the problematic use of smart phone among adolescent students in selected nursing colleges, Haryana with a view to develop an information booklet.** (Dr. Khemchand), Department of Nursing, Tantia University, Sri Ganganagar.

2. Likhmaram. **A study to assess effectiveness of structured teaching programme on knowledge regarding insertion of post-partum intrauterine devices among GNM 3rd year students of selected nursing institution at Barmer.** (Dr. Khemchand), Department of Nursing, Tantia University, Sri Ganganagar.

3. Manisha Rani. **A study to assess the effectiveness of lifestyle intervention package on health behaviour on anthropometric measurements of school children of various school of dist. Fatehabad.** (Dr. Khemchand), Department of Nursing, Tantia University, Sri Ganganagar.

4. Srivastava, Shikha. **A study to assess the effectiveness of self instructional module on knowledge regarding computer vision syndrome and its prevention among computer professionals in selected area of Bhopal, M P.** (Dr. Khemchand), Department of Nursing, Tantia University, Sri Ganganagar.

## Pharmaceutical Science

1. Thakare, Chandrakant Vishnuji. **Preclinical evaluation of some medicinal plants and their formulation for the treatment of epilepsy.** (Dr. C D Upasani and Dr. S S Patil), Department of Pharmaceutical Science, Swami Ramanand Teerth Marathwada University, Nanded.

2. Usnale, Sharad Vasantrao. **Pharmacological evaluation of some Indian medicinal plants and their combination for aphrodisiac activity.** (Dr. K R biyani and Dr. S S Patil), Department of Pharmaceutical Science, Swami Ramanand Teerth Marathwada University, Nanded.

## PHYSICAL SCIENCES

### Biochemistry

1. Aulakh, Manpreet Kaur. **Effect of different TiO<sub>2</sub> morphologies for selective photoreduction.** (Dr. Bonamali Pal), School of Chemistry and Bio-Chemistry, Thapar Institute of Engineering and Technology, Patiala.

### Chemistry

1. Ramya.A.N. **Development of molecular probes and nano-carrier delivery system for intracellular sensing and theranostic applications.** (Dr. Kaustabh

Kumar Maiti), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

2. Adarsh Kumar. **Reductive catalytic transformation of lignin and lignin derived bio-oil to functional chemicals.** (Dr. Thallada Bhaskar), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

3. Agrawal, Karishma. **Value addition of flavonoids and related compounds for Pharmacological activities.** (Dr. Karishma Agarwal), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

4. Das, Gourab. **Self-assembly and optical properties of phenyleneethynylene and BODIPY based  $\pi$ -systems.** (Dr. A Ajayghosh), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

5. Das, Tamal. **Insights into messy chemistry related to cosmology and origin of life obtained by employing state-of-the-art computational methods.** (Dr. Kumar Vanka), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

6. Gupta, Kanika. **Nanostructured carbon-based materials for wastewater remediation and environmental applications.** (Dr. Om P. Khatri), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

7. Inder Kumar. **Development of photo-catalytic methodologies for the C-C and C-heteroatom bond formation.** (Dr. Upendra Sharma), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

8. Killi, Naresh. **Design and synthesis of new polymeric carriers as drug delivery systems.** (Dr. GVN Rathna), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

9. Mandal, Debranjana. **Role of surface passivation and doping on the development of quantum dot solar cells.** (Dr. Arup K. Rath), Department of Chemical Engineering, Academy of Scientific and Innovative Research, Ghaziabad.

10. Nagaveni, V B. **Synthesis, and spectral studies on novel organic fluorescent dyes.** (Dr. K M Mahadevan), Department of Chemistry, Kuvempu University, Shankaraghatta.

11. Sajena, K S. **DNA-interactions, self-assembly and photophysical properties of DNA three-way junction templated fluorescent silver nanoclusters and functional tetraphenylethylene derivatives.** (Dr. Joshy Joseph), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

12. Sankar, Gorakala Uma. **Design, synthesis and characterization of multi chromophoric organic small molecules for organic light emitting diodes applications.** (Galla V. Karunakar), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

13. Sathish, Puppala. **Development of transition metal-catalyzed annulation approaches towards the synthesis of 3,4-fused indoles.** (Dr. Ch Raji Reddy), Faculty of Chemical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

## Physics

1. Ahmad, Irshad. **Development of MgB<sub>2</sub> with enhanced flux pinning properties and optimization of sheaths for monofilamentary superconducting wires using current transfer length.** (Prof. P. M. Sarun), Department of Physics, Indian Institute of Technology, Dhanbad.

2. Borah, Chandra Kamal. **Study of 2D ultrathin layer of molybdenum disulfide (MoS<sub>2</sub>) for photovoltaic application.** (Prof. Sanjeev Kumar), Department of Physics, Rajiv Gandhi University, Itanagar.

3. Ghosh, Samrat. **Influences of dark sector on local gravitational phenomena.** (Prof. A Mukhopadhyay and Dr. A Bhadra), Department of Physics, University of North Bengal, Darjeeling.

4. Lincy, Jovitha V J. **A study on anammox microbes from Oxygen Depleted Environments (ODEs) of the Indian ocean using molecular tools.** (Dr. Cathrine Sumathi Manohar), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad.

5. Shitole, Jyoti Babasaheb. **Synthesis and characterization of Yttrium doping in Ni-Cu nanoferrites by sol-gel technique.** (Dr. S N Keshatti), Department of Physics, Swami Ramanand Teerth Marathwada University, Nanded.

6. Thakur, Vikas Narayan. **Design development and analysis of the pressure standards and sensors.** (Dr. Ashok Kumar), Department of Physics, Dr Babasaheb Ambedkar Marathwada University, Aurangabad.

7. Vanramlawma. **Concentration of natural radionuclides in water sources and its surroundings soil in Aizawl and Kolasib Districts of Mizoram.** (Prof. Zaithazauva Pachuau and Prof. B Zoliana), Department of Physics, Mizoram University, Aizawl.

8. Verma, Apoorva. **Low-temperature magnetic and transport studies of magnetic and superconducting nanostructures.** (Dr. Anurag Gupta), Faculty of Physical Sciences, Academy of Scientific and Innovative Research, Ghaziabad. □



(A Religious Minority Institution)  
(University established by an Act No. 18 of the  
Karnataka State Legislature)

No. KBNU/REC/2020-21

Date : 04-06-2021

## RECRUITMENT NOTIFICATION

### FACULTY OF LAW

Applications are invited from eligible candidates for the post of PROFESSOR, ASSOCIATE PROFESSOR & ASSISTANT PROFESSOR.

Salary commensurate with experience and qualification. For qualification and other details, please visit University website: [www.kbn.university](http://www.kbn.university).

The applicants are advised to send their application through e-mail on [recruitments@kbn.university](mailto:recruitments@kbn.university) followed by hardcopy to the following address:

**Registrar**, Khaja Bandanawaz University Campus,  
Rauza-i Buzurg, KALABURAGI - 585 104 (Karnataka State)  
Contact No. +91 8472 236041 (Extn. 200)

**REGISTRAR**



## INDIAN INSTITUTE OF TECHNOLOGY KANPUR RECRUITMENT SECTION

IIT Kanpur invites online applications, from eligible Indian Nationals for appointment on the following posts on **regular basis (with one year probation period – which may be extended based on assessment of performance)**:

Sl. No.	Name of the post(s)	No. of Vacancies						Pay-Level (7th CPC)	Max. Age (Relaxation as per rules)	
		SC	ST	OBC	PWD	EWS	UR			TOTAL
1	Deputy Registrar	1	-	-	-	-	2	3	Level-12	50
2	Assistant Registrar (P K Kelkar Central Library)	1	-	-	-	-	-	1	Level-10	45
3	Assistant Registrar	-	-	3	1(UR)	1	3	8		
4	Hindi Officer	-	-	-	-	-	1	1		
5	Students' Counselor	-	-	-	-	-	1	1		
6	Junior Technical Superintendent (Translation)	-	-	-	-	-	1	1		
7	Junior Technical Superintendent	3	-	1	1(UR)	1	6	12	Level-6	35
8	Junior Superintendent (Centre for Nano Sciences)	-	-	-	-	-	1	1		
9	Junior Superintendent	1	1	1	1(UR)	2	8	14		
10	Physical Training Instructor	1	-	1	-	-	2	4		
11	Junior Technician	4	-	1	1-OBC-HH	2	9	17	Level-3	30
12	Junior Assistant	4	1	10	1-UR-OH 1-UR-VH	4	10	31		
13	Driver Gr. II	-	-	-	-	-	1	1		
<b>TOTAL</b>		<b>15</b>	<b>2</b>	<b>17</b>	<b>6</b>	<b>10</b>	<b>45</b>	<b>95</b>		

For detailed advertisement, please visit the Institute website, [www.iitk.ac.in/infocell/recruitment](http://www.iitk.ac.in/infocell/recruitment) from 13.10.2021 onwards. Interested candidate can apply through **online mode only** latest by **05.00 PM of November 16, 2021**.

Advt. No. 1/2021

**Registrar**



**Dr. Rafiq Zakaria Campus**  
**Maulana Azad College of Arts,**  
**Science & Commerce,**

**Dr. Rafiq Zakaria Marg, Rauza Bagh,**  
**Aurangabad 431001 Tele : 0240-2381102**

**NAAC Accredited Grade "A" ISO 9001: 2008 Certified**  
**Minority Institution**

### APPOINTMENTS

Following posts of teaching staff on CHB basis (Grant-in-Aid Senior College) are vacant in our college for the academic year 2021-22. Eligible candidates shall send the application with two Xerox copies of their testimonial on or before 28-10-2021 to Principal, Maulana Azad College of Arts, Science & Commerce, Aurangabad.

Sr.	Subject	No. of Posts	Sr.	Subject	No. of Posts
1.	Hindi	02	8	Botany	05
2.	Marathi	01	9	Sociology	01
3.	Arabic	01	10	History	01
4.	Physics	06	11	Political Science	01
5.	Chemistry	06	12	Commerce	03
6.	Zoology	04	13	Electronics	04
7.	Geology	03			

Eligibility criteria as per the UGC, University and Government of Maharashtra norms.

In-service candidates should bring N.O.C. from working institute.

No TA/DA will be paid to candidates for attending interview.

**Dr. Mazahar Ahmed Farooqui**  
**Principal**

## VINAYAKRAO PATIL SHIKSHAN PRASARAK MANDAL ARTS, COMMERCE AND SCIENCE COLLEGE, KANNAD

(Affiliated to Dr. Babasaheb Ambedkar Marathwada University,  
Aurangabad)

### WANTED

Applications are invited for the post of **Principal** in V. P. S. P. M. S. Arts, Commerce & Science College, Kannad, Dist. Aurangabad (MS). Educational Qualification, Pay Scale & Service conditions are as prescribed by the UGC, Govt. of Maharashtra & Dr. Babasaheb Ambedkar Marathwada University, Aurangabad from time to time.

Candidates should submit their **API record** as per the requirement. Appointment of the said post will be for tenure of five years from the date of appointment or up to the attainment of superannuation whichever is earlier. Those who are already in service should apply through proper channel with one copy to Deputy Registrar, Special Cell, Dr. Babasaheb Ambedkar Marathwada University, Aurangabad.

The application with attested copies should reach the **General Secretary, Vinayakrao Patil Shikshan Prasarak Mandal, C/o Smt Venutai Chavan Kanya Prashala, Cidco, N-8, Aurangabad-431003 (MS) within 15 days** from the date of publication of this advertise.

**President**  
**Kishor Patil**

**General Secretary**  
**Parmeshwar Kakade**



**Dr. Rafiq Zakaria Campus**  
**Dr. Rafiq Zakaria Centre for Higher Learning & Advanced Research**  
 Dr. Rafiq Zakaria Marg, Rauza Bagh,  
 Aurangabad-431001  
 (Non Grant in Aid Minority Institute)  
 Telephone : 0240-2382820/2381102

### APPOINTMENTS

Following posts are to be filled in our institute on Fix Pay /CHB basis to teach PG Courses, for the academic year 2021–22. Eligible candidates shall send their application with necessary testimonials on or before **28-10-2021** to Director, Dr. Rafiq Zakaria Centre for Higher Learning and Advanced Research, Dr. Rafiq Zakaria Campus, Aurangabad.

Sr. No.	Name of the Subject	No. of Posts	Sr. No	Subject	No of Posts
1	Chemistry	Two	7	Computer Science	Two
2	Analytical Chemistry	Two	8	Microbiology	One
3	Industrial Chemistry	Two	9	English	Two
4	Botany	Two	10	Urdu	Two
5	Zoology	Two	11	Sociology	Two
6	Mathematics	Two			

- Numbers of posts are liable to be changed and Management's decision for filling up the posts will be final.
- Eligibility criteria as per the UGC, University and Government of Maharashtra norms.
- All the appointments are subject to the approval of Dr Babasaheb Ambedkar Marathwada University, Aurangabad.
- The post are purely for one academic year 2021-22.
- Selected candidates will be paid a fix monthly salary till the end of academic year 2021-22.
- No TA/DA will be paid to candidates for attending interview.

**Dr Arif Pathan**  
 In-charge Director

## NOTIFICATION

Applications are invited for one permanent post of **Assistant Professor (Malayalam)** reserved for persons with disabilities at **SNM COLLEGE, Maliankara P.O. 683 516.**

In continuation of the advertisement dated 09-02-2021 of this College inviting applications for **3 posts of Assistant Professor (Malayalam)**, one post in the above mentioned 3 posts is reserved for person with disability.

**Age and qualifications:** As prescribed by the Government of Kerala, MG University and UGC Regulations 2018.

Applications form can be had from the college on payment of Rs. 1,000/- or by post on payment of Rs. 1,050/-. Duly filled in application with attested copies of marklists and other certificates should reach the Manager **within 30 days** from the date of publication of this notification.

Those who have already applied in response to our earlier advertisement dated 09-02-2021 need not apply again.

Maliankara  
 11.10.2021

(Sd/-)  
**Manager**  
 9447702858

Jeevan Jyot Educational Charitable Trust  
**REENA MEHTA COLLEGE OF COMMERCE & MANAGEMENT STUDIES**  
 S.No. 574/5, Near Fly-over Bridge, 150 Feet Road, Opp. Maxux Mall,  
 Bhayandar (W), Dist. – Thane 401101

### MINORITY

APPLICATIONS ARE INVITED FOR THE FOLLOWING POSTS  
 FROM THE ACADEMIC YEAR 2021-22

### UNAIDED

Sr. No.	Cadre	Subject	Total No. of Posts	Category
1.	Principal	---	01	01 - OPEN
2.	Assistant Professor	Accountancy & Fin. Management	01	01 - OPEN
3.	Assistant Professor	B.M.S.	03	01 - OPEN
4.	Assistant Professor	B.B.I.	01	01 - OPEN
5.	Assistant Professor	Commerce	01	01 - OPEN
6.	Assistant Professor	Computer Systems and Application	01	01 - OPEN
7.	Assistant Professor	Psychology	01	01 - OPEN
8.	Librarian	---	01	01 - OPEN

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

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

Candidates having knowledge of Marathi will be preferred.

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

The Government Resolution & Circular are available on the website: [mu.ac.in](http://mu.ac.in).

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

Application with full details should reach the VICE-CHAIRMAN, REENA MEHTA COLLEGE OF COMMERCE & MANAGEMENT STUDIES, S.NO. 574/5, Near Fly Over, 150 Feet Road, Opp. Maxux Mall, Bhayander (W), Dist. Thane – 401101 within 15 days from the date of publication of this advertisement. This is University approved advertisement.

Sd/  
**Vice-Chairman**

**Dayanand Education Society's  
DAYANAND COLLEGE OF LAW, LATUR**

**WANTED**

Applications are invited for the post of **Principal** to be filled in **Dayanand Education Society's, DAYANAND COLLEGE OF LAW, LATUR, Dist. Latur (Maharashtra)** (Granted). Eligible candidates should submit their application along with all necessary documents **within Fifteen days** from the date of publication of the Advertisement by Registered post only.

Sr. No.	Name of the Post (Designation)	No. of Post	Reservation
<b>1</b>	<b>Principal</b>	<b>One (01)</b>	<b>Unreserved</b>

**Educational Qualification:-**

**A. Eligibilities :-**

1. A Master's Degree with atleast 55% marks (or an equivalent grade a point scale wherever grading system is followed) by a recognized University.
2. A Ph.D. Degree in concerned/allied/relevant discipline (s) in the institution concerned with evidence of published work and research guidance.
3. Professor/Associate Professor with a total experience of fifteen years of teaching/research in Universities, College and other Institutions of Higher Education.
4. A minimum of 10 research publication in peer reviewed or UGC listed journals.
5. A minimum of 110 research score as per Appendix II, Table 2 of UGC Regulations 2018.
6. **Academic Eligibility and other rules regulations as per UGC Regulation 18 July 2018 and Govt. Resolution No Misc-2018/C.R.56/UNI-1 date 08 March, 2019.**

**B. Tenure:-**

- A. College Principal shall be appointed for a period of five years, extendable for another term of five years on the basis of performance assessment by a committee appointed by the University, constituted as per these Rules.

**Salary & Allowances:-**

Pay Scales as per the UGC, State Government & Swami Ramanand Teerth Marathwada University Rules from time to time.

**NOTE:-**

1. Prescribed application form is available on the University website ([www.srtmun.in](http://www.srtmun.in))
2. No T.A.D.A. will be paid to attend the interview.
3. Eligible Candidates those who are already in services should submit their application through proper channel.
4. All attested Xerox Copies of certificates and other relevant documents should be attached with the application form.
5. The vacant posts are being filled under the decision of Hon'ble High Court, Aurangabad Bench Petition No. 12051/2015.
6. The original certificates must be provided at the time of interview.

**Correspondence Address:**

The President/Secretary  
Dayanand Education Society's  
Dayanand College of Law,  
Latur - 413512

**Secretary**  
**Ramesh Govindlalji Biyani**  
Dayanand Education Society, Latur

**President**  
**Laxmiraman Bankatlal Lahoti**  
Dayanand Education Society, Latur



**Dr. Rafiq Zakaria Campus**  
**Maulana Azad College of Arts, Science & Commerce**  
**Dr. Rafiq Zakaria Marg, Rauza Bagh, Aurangabad 431001**  
**Tele 0240-2381102**  
**NAAC Re-Accredited Grade "A"**  
**"College with Potential for Excellence" Status**  
**(Minority Institution)**

**APPOINTMENTS**

Following posts of teaching staff on Fix Pay/CHB (Non Grant Courses) are vacant in our College for the academic year 2021-22. Eligible candidates shall submit their application alongwith Xerox Copies of their documents to Principal, Maulana Azad College, Dr. Rafiq Zakaria Campus, Rauza Baugh, Aurangabad through Speed Post / in person on or before 28-10-2021.

Sr	Name of Subject	Nature of post	Course	No. of Posts
1.	Chemistry	Fix pay	P.G.	02
2.	Analytical Chemistry	Fix pay	P.G.	02
3.	Industrial chemistry	Fix pay	P.G.	02
4.	Computer Science	Fix pay	P.G.	02
5.	Mathematics	Fix pay	P.G.	02
6.	Commerce	Fix pay	P.G.	02
7.	Geology	Fix pay	P.G.	02
8.	English	CHB	P.G.	02
9.	Microbiology	Fix pay	P.G.	02
10.	Biotechnology	Fix pay	P.G.	02

Sr	Name of Subject	Nature of post	Course	No. of Posts
11.	MPM	Fix pay	P.G.	02
12.	BBA	Fix pay	U.G.	03
13.	B. Com E com	Fix pay	U.G.	03
14.	B.C.A.	Fix pay	U.G.	04
15.	B.C.S.	Fix pay	U.G.	04
16.	BSc. Biotechnology	Fix pay	U.G.	04
17.	Psychology	CHB	UG	02
18.	Economics	CHB	UG	02
19.	Physical Education	CHB	UG	02
20.	NCC	CHB	UG	02

- Numbers of posts are liable to be changed and Management's decision for filling up the posts will be final.
- Eligibility criteria as per the UGC, University and Government of Maharashtra norms.
- If qualified candidate (NET/SET/PhD) are not found then candidate with PG will be considered subject to University approval.
- All the appointments are subject to the approval of Dr Babasaheb Ambedkar Marathwada University, Aurangabad.
- The post are purely for one academic year 2021-22.
- Selected candidates will be paid a fix monthly salary till the end of academic year 2021-22.
- Online/in person interviews will be conducted as per Govt. of Maharashtra directives.
- No TA/DA will be paid to candidates for attending interview.

**Dr. Mazahar Ahmed Farooqui**  
**Principal**

## Announcement

The **Special Number of the University News** on ‘**Realising Sustainable Development Goals through Higher Education Institutions**’ is being brought out on various themes. The **Special Issue** will cover articles of eminent educationists and policy makers. Readers of the University News are also invited to contribute to the Special Number by submitting papers/articles on above theme by **October 25, 2021**. The papers will be published in the Issue subject to the approval of the Editorial Committee of the University News. The Issue shall contain papers on Sustainable Development Goals on the following Subthemes:

- A. *Implementation of SDGs in India: Status, Scope and Future Action.*
- B. *Strategies and Approaches in Teaching-Learning to Realize SDGs.*
- C. *Realising SDGs through Research and Innovation: Strategies and Approaches.*
- D. *Engagement of Universities with Society to Realise SDGs.*
- E. *Creating Policies and Roadmap for Realizing SDGS through Indian Higher Education.*
- F. *Individual Article on each of the 17 SDGs.*

### Guidelines for Contributors

Articles submitted for the Journal should be original contributions and should not be under consideration for any other publication at the same time. A declaration is to be made by the author in the covering letter that the paper is original and has not been published or submitted for publication elsewhere.

Manuscripts including tables, figures and references should be around 3000-4000 words for articles, 2000 – 5000 words for Convocation Addresses, 1000 words for Book Reviews and 600 words for Communications. All the manuscripts should typed in double-space with 12 point font and ample margin on all sides on A 4 size paper.

The cover page should contain the title of the paper, author’s name, designation, official address, address for correspondence, contact numbers and e-mail address.

The main text should not contain footnotes. References should be given at the end of the manuscript and should contain only those cited in the text of the manuscript. The full reference should be listed at the end in alphabetical order running the following style:

#### Books

- Miles, M., and Huberman, M., (1994). *Qualitative Data Analysis*. London: Sage.

## Articles

- Over, R.(1982). Does research productivity decline with age? *Higher Education* 11: 511-20.

## Chapter in a Book

- Rendel, M. (1986). How many women academics 1912-1977? In R. Deem(ed.), *Schooling for Women's Work*. London: Routledge.

Authors may send their articles addressing to the Editor through e-mail: **ramapani.universitynews@gmail.com/rama.pani2013@gmail.com with a copy to universitynews@aiu.ac.in.**

Authors are responsible for any copyright clearance, factual inaccuracies and opinion expressed in their paper.

The final decision on the acceptance or otherwise of the article rests with the Editorial Committee and it depends entirely on its standard and relevance. The article accepted may be modified to meet the journal's standards of contents, presentation and style. Authors may also be requested to revise their manuscripts before they can be accepted for publication. Correspondence in this regard will be done with the first named author unless otherwise indicated.

The Editor is free to make editorial corrections in the content as well as title of the article and change the title in accordance with the content of the article as well as the overall theme of the Issue.

Maximum time taken for processing the article is six months. Contributors are free to send the material to any other publication after a period of six months from the date of their submitting the article to the University News, if they do not receive any intimation from AIU.

Author will receive two complementary copies of the Journal immediately after its publication.

AIU may re-use the articles published in the University News for its various other publications including University News.

AIU may extend courtesy to other journals or websites to use the articles published in the University News if due credit is given to the author(s) of the article(s) and the University News.

Manuscripts be sent to: The Editor, University News, Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi- 110 002. E-mail: *ramapani.universitynews@gmail.com / universitynews@aiu.ac.in* on or before **October 25, 2021.**

**Editor, University News**

## **AIU Invites Proposals for Collaboration for organizing *ANVESHAN- Student Research Conventions-2021-22***

Association of Indian Universities, New Delhi organizes *Anveshan-Student Research Convention* every year to identify and nurture the young talents and budding researchers in the Indian Universities. In these Conventions, Innovative Research Projects are invited from the Students (Undergraduate to Ph.D. level), and assessed by a group of experts of the field on a well laid criteria. The best Research Projects are conferred with certificates and awards. The Projects are invited from the disciplines of Basic Sciences and Applied Sciences, Engineering and Technology, Agriculture and allied fields, Health Sciences and allied fields, Social Sciences; Humanities; Commerce; Business Management; and Law. The Conventions are to be held at two levels i.e. **Zonal and National**. The duration of each convention is of **two days**. These events are to be conducted in the current Financial Year i.e. before **March 31, 2022**.

AIU invites proposals from member universities/institutions for hosting these Conventions in Five Zones - East, West, North, South, Central and One National Level Convention. Interested Member universities/institutions may send their Expression of Interest (EoI) along with proposal duly endorsed by the Head of the Institutions to AIU at the address given below:

**Dr Amarendra Pani**  
**Joint Director and Head**  
**Association of Indian Universities**  
**AIU House, 16 Comdrade Indrajit Gupta Marg**  
**New Delhi – 110 002**  
**E-mail: *researchaiu@gmail.com***

**The proposals are required to be submitted latest by October 20, 2021.** The Event will be finalized on mutually convenient dates and terms and conditions laid down by AIU. For any further query, please contact on: 011-23230059, Extn-202/209, **E-mail: *researchaiu@gmail.com***. The details can also be downloaded from AIU Website: ***www.aiu.ac.in***

**N.B.: AIU is not a Funding Organization. All these events are AIU activities for which Collaboration from member institutions are solicited. Primarily, the events will be conducted under the banner of AIU. The details of terms and conditions will be communicated on selection of the Proposal. In case of the events to be organized in physical/ conventional mode, a token financial support will be provided by AIU.**

**Proposal must be sent to AIU with the Approval /Endorsement of Vice Chancellor/ Head of the Institution.**

# Announcement

Edited Volume

on

*'75 Years of Higher Education in Independent India'*

An Edited Volume is being brought out on the theme '**75 Years of Higher Education in Independent India**' to commemorate *75 years of Indian Independent, Azadi Ka Amrit Mahotsav*. The Volume will cover articles of eminent educationists and policy makers. Readers of the University News are also invited to contribute to the Edited Volume by scholarly papers on the above theme, and below sub theme by December 15, 2021. The Volume shall contain papers on the following Subthemes:

- i. *Significant Landmarks in Higher Education in Independent India.*
- ii. *Higher Education Policies and their Impact.*
- iii. *Democracy, Plurality, Equality and Universality of Indian Higher Education.*
- iv. *Rise of Research, Innovation and Entrepreneurship in Independent India.*
- v. *Student dynamics in Indian Higher Education.*
- vi. *Impact of Indian Higher Education on Community.*
- vii. *Functional Dimensions of Indian Higher Education: Governance, Leadership, Financing.*
- viii. *Professional Education in India.*
- ix. *Islands of Excellence in Indian Higher Education.*
- x. *Higher Education in India: Roadmap for 75 years Ahead.*

The papers will be published in the volume subject to fulfillment of AIU Norms for publication as given in AIU Website and on the approval of the Editorial Committee. Manuscripts may be emailed to the Editor, University News, Association of Indian Universities, AIU House, 16 Comrade Indrajit Gupta Marg (Kotla Marg), New Delhi-110 002. E-mail: [ramapani.universitynews@gmail.com](mailto:ramapani.universitynews@gmail.com)/[universitynews@aiu.ac.in](mailto:universitynews@aiu.ac.in)/[rama.pani2013@gmail.com](mailto:rama.pani2013@gmail.com), Phone: 011-23235009 (6 lines), Fax: 011-23232131 on or before **December 15, 2021**.



**EDUCATIONAL TECHNOLOGY AND  
MANAGEMENT ACADEMY**

and



**ASSOCIATION OF  
INDIAN UNIVERSITIES**

*Present*

**International Conference on Hybrid, Blended and E-Learning  
3-4-5 December 2021**

***Association of Indian Universities (AIU) and Educational Technology and Management Academy (ETMA) are jointly organizing an Online International Conference on 'Technology Integrated Learning Focusing on Hybrid, Blended and E-Learning' during December 03-05, 2021.***

The primary objective of the Conference is to create a forum for practitioners to meet the global leaders in technology-integrated education. To meet this objective, the Conference will be bringing together some of the finest experts on technology integrated education from all over the world and India at a common platform. The Conference will have four keynote sessions, two panel discussions, ten paper presentation sessions and eight workshops.

Patrons of the Conference are: Col. Dr G. Thiruvassagam, President AIU and Vice Chancellor, AMET University, Chennai; Prof Marmar Mukhopadhyay, Former Professor, NIEPA and President, ETMA; and Dr Pankaj Mittal, Secretary General, Association of Indian Universities, New Delhi.

Invited Keynote Speakers of the Conference are *Prof. Stephen Petrina*, Professor, Department of Curriculum and Pedagogy, University of British Columbia, Vancouver; *Prof. V. Chinapah*, Emeritus, Department of Education, Stockholm University, Stockholm; formerly at UNESCO Headquarters in Paris-France for 16 years; *Dr N. M. Ostashewski*, Associate Professor, Athabasca University Distance Education Program, Alberta, Canada; *Dr Libing Wang*, Chief of Educational Innovations and Skills Development and Senior Programme Specialist in Higher Education at UNESCO, Bangkok.

The Sessions will be chaired by *Dr. Pankaj Mittal*, Secretary General, Association of Indian Universities, Former Vice Chancellor, BPS Women University, Government of Haryana; *Prof Tony Bates*, Distinguished Visiting Professor, Chang School of Continuing Education, Ryerson University; *Prof Matiul Alam*, Professor of the Education, University of British Columbia, and CEO of World Education, Vancouver, Canada; *Dr Sanjaya Mishra*, Education Specialist, e-Learning, Commonwealth of Learning, Vancouver.

There will be two panel discussions – one each on ***Technology-enabled Learning Assessment and Examination Management; and Innovations and Research on Technology Enabled Learning*** on 5<sup>th</sup> December, 2021.

Expert panelists invited for the Session on 'Technology-Enabled Learning Assessment and Examination Management' are *Dr Vineet Joshi*, Additional Secretary, Ministry of Education, Government of India and Chairman, National Testing Agency, India; *Mr Anshul Sonak*, India Global Director, Digital Readiness Programs and Senior Director for Global AI Readiness at Intel Corporation, Singapore; *Dr Manish Gupta*, Director of Google Research India & Infosys Foundation, Chair Professor at IIIT.

Expert panelists invited for the session on 'Innovation and Research on Technology-Integrated Education' include *Dr Som Naidu*, Principal Fellow of the Higher Education Academy (PFHEA); Executive Editor, Distance Education Journal (Australia's ODLA), Former Pro-Vice Chancellor, The University of South Pacific, Fiji; *Dr Indira Koneru*, Associate Dean and Head, e-Learning Department, ICFAI Business School and Founding Director, Koneru Bhaskara Rao and Hemalata Human Development Foundation; *Prof Amarendra Behera*; Joint Director, Central Institute of Educational Technology (CIET), National Council of Educational Research and Training, New Delhi.

There will be 8 parallel workshops on the themes: Learning 321 Going forward to Normal: Education in a Different World Design Thinking Repurposing OER for Blended Learning; Virtual Reality in Education; Open Education Resources; Advanced Educational Research Methods; AI and Machine Learning. Workshops are free for all the participants. Workshops will be run parallel, participants can choose one theme, and must register in advance.

**Call for Paper Presentation and Participation:** The Conference invites participation and presentation of case studies, thematic and research papers on ***Technology-integrated Education, Hybrid Learning, Blended Learning, Online Education and e-Learning.***

A nominal Registration Fee of Rs.1000/- need to be paid for registration through the link [https://docs.google.com/forms/d/e/1FAIpQLSffPXeR10iGh\\_T83pSh0JivJvMCOkBTUixPw7ZqChTCSUM9Q/viewform](https://docs.google.com/forms/d/e/1FAIpQLSffPXeR10iGh_T83pSh0JivJvMCOkBTUixPw7ZqChTCSUM9Q/viewform).

For updated information, please visit: [www.aiu.ac.in](http://www.aiu.ac.in) or [www.etma-india.in](http://www.etma-india.in).

For further information contact, Principal, Amitava Ghosh, Conference Secretary at [amitavaghosh2k1@gmail.com](mailto:amitavaghosh2k1@gmail.com) or Sri Chandan Sarkhel at [etma.india@gmail.com](mailto:etma.india@gmail.com).

or

Dr S Rama Devi Pani, Editor, University News, Association of Indian Universities, New Delhi at [ramapani.universitynews@gmail.com](mailto:ramapani.universitynews@gmail.com) or Mobile No: 09582573719

**ASSOCIATION OF INDIAN UNIVERSITIES  
ADVERTISEMENT TARIFF  
UNIVERSITY NEWS JOURNAL**

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SELLERS & DISTRIBUTORS DISPLAY**

(Amount in Rupees)

Categories of Advertisement	1 Insertion	4 Insertions	8 Insertions	12 Insertions
Full Page	15000	45000	85000	120000
Half Page	8000	28000	50000	68000
Quarter Page	5000	16000	28000	40000
Cover (Inside)	16000	55000	100000	144000
Cover (Back)	20000	65000	120000	165000

**B. TARIFF FOR SPECIAL NATURE OF MATTERS/ITEMS (DOUBLE THE RATES)**

TARIFF FOR SUPPLIERS OF COMPUTERS, COMPUTER STATIONERY & PERIPHERALS, SCIENTIFIC & SURGICAL INSTRUMENTS, SPORTS GOODS AND OTHERS (*NOT COVERED IN ANY FORM OF THE TARIFF*) WILL BE AT DOUBLE THE RATES AND TARIFF CAN BE HAD ON REQUEST.

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**MECHANICAL DATA OF JOURNAL**

Size of Page 21 cms x 27 cms

**PRINT AREA**

Full Page 23 cms (Height) x 16.5 cms (Width)

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