

A Weekly Journal of Higher Education

# **Association of Indian Universities**

Vol. 61 • No. 31 • July 31-August 06, 2023



## Neeraj Saxena

Redefining Doctoral Education with Independent Research Paths

Chinmoy Kumar Ghosh, Subhash Chandra Samanta and Pradipta Panchadhyayee
Road to Physics Curricula: Some Thoughts in the Light of National Education
Policy—2020 and the Role of IAPT

#### Shiyakumar U Ganachari

Rejuvenation of Andragogy for Sustenance in Quality Higher Education

# Prasenjit Das and Pranab Barman

Optimal Learning Environment for Higher Education Students in the Context of National Education Policy—2020: An Analysis

# Jagdeep Dhankhar

Execution of Ideas is the Key to Progress

- Convocation Address

100000	
Vol. 61	July 31-
No. 31	August 06, 2023
Price	Rs. 30.00

A Weekly Journal of Higher Education Published by the Association of Indian Universities

In This Issue	
ITEMS	PAGE
Articles	
Redefining Doctoral Education with Independent Research Paths	3
Road to Physics Curricula: Some Though in the Light of National Education Policy-2020 and the Role of IAPT	ts 5
Rejuvenation of Andragogy for Sustenand in Quality Higher Education	e 14
Optimal Learning Environment for Highe Education Students in the Context of National Education Policy-2020: An Analysis	
Convocation Address	
Indian Institute of Technology Guwahati, Assam	23
Campus News	28
AIU News	30
Theses of the Month (Humanities)	34
Advertisement	37

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

I	nland		Fore	ign
Institutio	ons Acad Stude	lemics/ ents	Airmail	Surface Mai
100	(at re	esidential	address of	uly)
-	Rs.	Rs.	USS	USS
1 year	1250.00	500.00	210.00	170.00
2 years	2200.00	900.00	400.00	300.00

Subscription is payable in advance by Bank DadMO only in favour of Association of Universities, New Delhi.

#### Paires:

Prof. G D Sharma

#### Emerial Committee Chairperson:

Dr (Ms) Pankaj Mittal

#### Editorial Committee:

De Baljin Singh Sekhon

Dr Amarendra Pani

De Yand Vir Singh

The Park Street

De See Rams Devi Pani

BeatCoronaTogether

# Redefining Doctoral Education with Independent Research Paths

Neeraj Saxena\*

Our universities have existed, thrived, and evolved performing the role of repository and generator of knowledge. The teachers have kept them going on, as holders and transmitters of knowledge- equipping graduates with knowledge and values who in turn should create value out of the resources and knowledge around. They have also indulged in research which is about challenging the status quo or exploration beyond the boundary of known knowledge or creation/synthesis of new knowledge and preparing new researchers in the process). Research takes knowledge as a resource and requires infrastructure and funds, besides a supervisor, for a university-run doctoral programme. Now that updated knowledge and tools are freely available for academic research and plugging into an international group (for specialized knowledge and training) is a right-hand and left click away, why not open up independent research in the universities, without supervisors? Teaching-learning has been redefined post-pandemic; why not research? After all, it is counted in as a 21st-century skill, powered now by Artificial Intelligence!

A university doctoral Programme is demanding on the critical thinking abilities of a postgraduate (or an exceptionally bright graduate); and is training in methods and methodologies of research. Also, training in using the relevant tools and techniques; experimentation and data acquisition; data analysis and interpretation; and documentation of findings and communicating it. The young researcher gets ample opportunity to interact with peers, listen to experts, participate in conferences, get trained in the tools to be used, pick up analytical abilities, and acquire communication skills in the run-up to the dissertation. Much of it is built around or is dependent on the supervisor and there are a lot of unsavoury things/ experiences also (that remain unpublished). This hasn't changed for generations and is the primary reason for the perpetuation of incremental research in universities.

The researchers in universities have the advantage of taking huge risks and should be into blue-sky or beyond-boundary investigations; which sadly isn't the case as most settle for something more than the supervisor has done. One of the reasons I am prompted to write this is the change in approach I could see, the under-/ postgraduate dissertations are prepared. Conventionally, it is a literature review which sets the ground for research-the guide asking the research scholar to find the gap and define a problem/ hypothesis to proceed further. Of late, it is observed that the literature review is being conducted at the end, basically to fulfil the requirements of a structured dissertation/ thesis. There are a few reasons for this trend as I see-firstly, the problem to work on can be picked quickly from the internet or domain groups (without requiring a guide). Secondly, updated global research work is a click away which obviates the review of work already done. Thirdly, there are tools and techniques (including Artificial Intelligence) available to define the research problem. Today workshops are being conducted on Chat GPT enabling researchers to generate research ideas, refine questions, and improve proposals and manuscripts, the latest shot in the arm for

\*Adviser, Technology Information, Forecasting and Assessment Council, Department of Science and Technology, Govt. of India, Technology Bhawan, New Mehrauli Road, New Delhi- 110016. E-mail: nrjsaxena@gmail.com



A Weekly Journal of Higher Education

# **Association of Indian Universities**

Vol. 61 • No. 35 • August 28-September 03, 2023



## Haribhau R Bhapkar

New Methods for Assessment and Accreditation: Pragmatic Approach Derived through the Recommendations of National Education Policy—2020

## C Maphosa and Chandraiah Esampally

Employability through Degree Programmes in Psychosocial and Economic Support: A Case of Institute of Distance Education, University of Eswatini

## Mahima Rana, Garima Pathania and Kulwant Singh Pathania

Strengthening Commerce and Management Studies in India: The Way Forward from the Recommendations of National Education Policy—2020

### Gedam Kamalakar and Kandi Kamala

Guidelines for Institutional Development Plan to Meet the Aims of New Education Policy–2020

# Jagdish Mukhi

Necessity to Synergize Ancient Wisdom and Knowledge for Today's Need

- Convocation Address



Vol. 61	August 28-		
No. 35	September 03, 2023		
Price	Rs. 30.00		

A Weekly Journal of Higher Education Published by the Association of Indian Universities

In This Issue	
ITEMS I	AGE
Articles	
New Methods for Assessment and Accreditati Pragmatic Approach Derived through the Recommendations of National Education Policy–2020	
Employability through Degree Programmes in Psychosocial and Economic Support: A Case of Institute of Distance Education University of Eswatini	. 8
Strengthening Commerce and Management Studies in India:The Way Forward from the Recommendations of National Education Policy—2020	15
Guidelines for Institutional Development Plan to Meet the Aims of New Education	

# Policy-2020 Convocation Address

Magarand University, Lumanni, Magarand	30
Campus News	33
AIU Newss	35
Theses of the Month	
(Humanities)	39
Advertisement	42

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

nland		Fore	ign
	the second second second	Airmail	Surface Mail
(at r	esidential	address of	nly)
Rs.	Rs.	USS	US\$
	ons Acad Stud (at r	ons Academics/ Students (at residential	ons Academics/ Airmail Students (at residential address of

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

400.00

300.00

#### Patron:

Prof. G D Sharma

2 years 2200.00 900.00

Editorial Committee Chairperson: Dr (Ms) Pankaj Mittal

#### Editorial Committee:

Dr Baljit Singh Sekhon Dr Amarendra Pani Dr Youd Vir Singh

#### Editor:

Dr Sistla Rama Devi Pani

#Let'sBeatCoronaTogether

# New Methods for Assessment and Accreditation: Pragmatic Approach Derived through the Recommendations of National Education Policy-2020

Haribhau R Bhapkar\*

Ancient Indian educational systems are unique and have a significant impact on how students around the world develop. The extant literature contains a wide range of techniques for rating and accrediting Indian academic institutions. According to the regulations and standards of the National Assessment and Accreditation Council (NAAC), marks are given based on criteria and metrics. This work finds the discrepancy when allocating metrics-based marks and eliminates it by defining new procedures for evaluating and accrediting academic institutions. The work takes a pragmatic approach to explaining three new techniques. In comparison to the previous literature, the new methods are more accurate and precise mathematically and practically. This work will steer the growth of top-notch institutions, colleges, and universities across India and contribute to the more effective implementation of NEP-2020.

Indian academia has one of the world's most enormous and varied educational systems. Recent policies and rules of the governments regarding privatization, autonomy, and new programs in today's emerging areas have enhanced the need for higher education. The main focus of academia is now on the quality and applicability of higher education. To assure quality education, state of the art infrastructure, and highly qualified resources, the National Assessment and Accreditation Council (NAAC) was established in 1994.

The NAAC has been consistently working to improve quality education, teaching-learning process, research, innovations, project, and design-based education, consultancy and training, and quality evaluation in Indian Higher Educational Institutes (HEI). The NAAC is also working to promote high-quality academia in India which comes in the top hundred institutes/ universities of the world.

The NAAC is based on core values such as contributing to national development, fostering global Competencies among students, nurturing a value system among students, stimulating the use of the latest technology, and questing for excellence. The NAAC has been consistently improving and nurturing the \*process of high-quality assessment and accreditation of the HEI in India.

NAAC follows grade points 0, 1, 2, 3, and 4 for the assessment and evaluation of the criteria. There are seven criteria as follows.

- 1. Curricular Aspects
- 2. Teaching Learning and Evaluation
- 3. Research, Innovations, and Extensions

<sup>\*</sup>Professor in Mathematics, MIT Art, Design and Technology University's School of Engineering and Science, Loni Kalbhor, Pune- 412201 (Maharashtra). E-mail: drhrbhapkar@gmail.com